

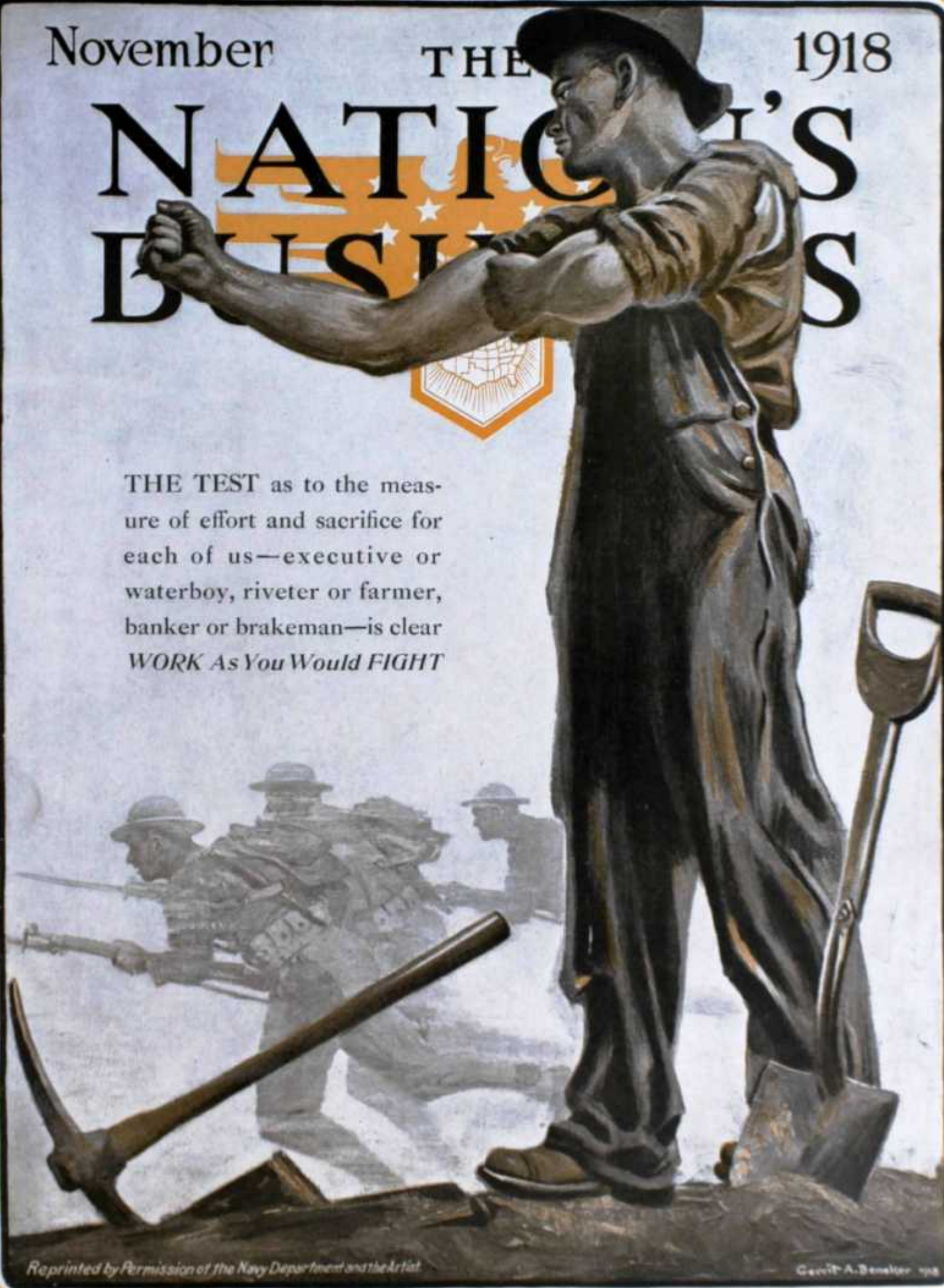
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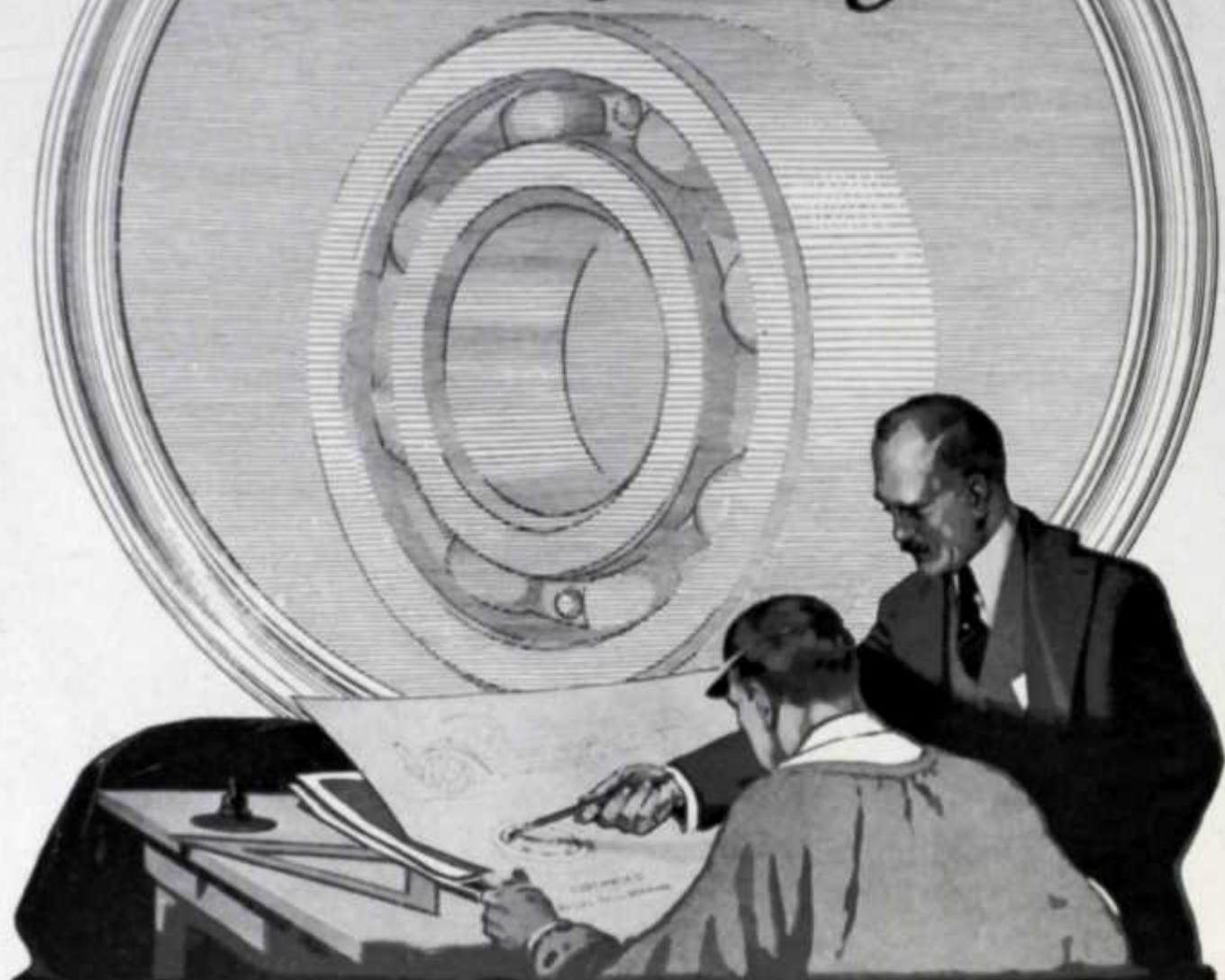
1918

NATION'S BUSINESS

THE TEST as to the measure of effort and sacrifice for each of us—executive or waterboy, riveter or farmer, banker or brakeman—is clear
WORK As You Would FIGHT



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Clark Equipment is found only on good motor trucks.

Send for informative literature.

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DON'T deprive yourself, your employes and your country of the benefits of higher efficiency simply because some kind of "efficiency service" did not prove satisfactory in your plant.

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Sales Offices in All Large American Cities



*An Installation of Six 14,700 Kva.
Westinghouse Water-Wheel Generators*

Westinghouse

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THE NATION'S BUSINESS

Published Monthly by the Chamber of Commerce of the United States, Washington, D. C.

MERLE THORPE, Editor

As the official magazine of the National Chamber, this publication carries authoritative notices and articles in regard to the activities of the Chamber, its Board of Directors and Committees. But in all other respects, the Chamber is not responsible for the contents of the article or for the opinions to which expression is given.

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Most Miles per Dollar

FIRST

Truck users naturally think of Firestone Tire equipment *first*, because Firestone is and always has been *first* in this field, from the earliest inventions and improvements in solid truck tires to the latest developments in giant cord tires. That is why

Over half the truck
tonnage of America
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Truck Tires

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FIRESTONE PARK, AKRON, OHIO
BRANCHES AND DEALERS EVERYWHERE

"HOUSES LIKE OURS—"

A Foreword by the Editor

■ ■ ■

LONG established businesses, especially in older France and England, attain a certain professional attitude toward their institutions, which newer and pioneer establishments, whose purpose is centered in the immediate transaction, are at a loss to understand. It is an indefinable something, a something which would sacrifice a percent in order to maintain a certain dignity and standard for the house. This feeling is but next door to a national sense, where the nation's well-being is dearer than that of the firm. Occasionally, like a flash, comes understanding—but let the incident speak for itself.

An American manufacturer who had sold steel articles to a British firm, a shipment of which had been held up for several months at the New York docks by an embargo, concluded forthwith that there was a conspiracy. He had discovered that his customer had gone to Sweden for the same goods on the advice of the British government. The explanation that Great Britain was doubtless buying Swedish steel to keep the Central Powers from getting it, and that probably the saving of ships by the shorter haul was an object, did not shake his belief that it was only a deep-seated plot to cripple American trade.

But a useful letter happened to be at hand to place before the manufacturer. It was from a French merchant to an Association in America which had just elected him to membership and whose Executive Committee, appreciating the tremendous sacrifices of Paris business houses, graciously excused the payment of fees during war. Pertinent

paragraphs were read to the manufacturer:

"I have received with a profound sentiment of satisfaction your honored letter of the eighth of August and I am greatly flattered by the unanimously favorable welcome which was accorded my candidature.

"I am very greatly obliged for the friendly action of your executive committee in excusing us from the payment of fees until the end of the war. True, we have had hours of mental anguish but we are as always ready for all sacrifices and houses like ours owe to the country the example of stability and poise. This morale is, besides, only that of all France which would perish rather than renounce her hopes."

"Houses like ours—" The manufacturer leaned over to read the phrase aloud to himself. "I get you," he said, "go on." The reading continued:

"Your great and powerful nation is seized with the same ideal of justice which sustains us today and hearing your heart beat with ours we no longer doubt our success. We see your soldiers everywhere, in our streets, in our railway stations, on our railroads, in our ports. Your sons are our sons. Those who have the privilege of witnessing their bravery in the line of battle are full of an affectionate and grateful thankfulness which knows no bounds.

"We have had the rare good fortune to be able to continue our business in spite of the bombardment. In view of this we must ask you to reconsider the decision you have made to excuse us from the payment of fees."

The manufacturer took the letter into his own hands and read it over again.

"A great letter!" he said. "It ought to be printed. It would help the country if more of us slap-dash American business men got the Frenchman's professional attitude and his national consciousness."

Barrett Specification Roofs

These Buildings all have Roofs that can be forgotten for 20 Years!

The owners of thousands of buildings scattered all over the United States (a few of which are illustrated here-with), have received from us a Surety Bond which guarantees their roofs against leaks, wear and maintenance cost for 20 years.

Of course, Barrett Specification Roofs do not need this guaranty to make them wear and last. We issue this Surety Bond Guaranty merely as means of impressing upon you our confidence in Barrett Specification Roofs. The guaranty is your assurance that you have on your building a roof that will give you complete, unqualified satisfaction for 20 years at least, and probably much longer.

All you need to do to have such a roof is to incorporate in your building specification this sentence: "The roof shall be laid according to The Barrett Specification dated May 1, 1916, and the contractors shall obtain for us the Barrett 20-Year Guaranty Bond."

There is no charge for this Bond. It is obtainable on any roof of fifty squares or larger in the United States or Canada in towns of 25,000 or more, and in smaller places where our inspection service is available.

Barrett Specification Roofs cost less per year of service than any other kind; they take the base rate of fire insurance; in fact, any way you look at it, a Barrett Specification Roof is the best roofing made for permanent buildings.

A copy of The Barrett 20-Year Specification, with roofing diagrams, sent free on request.

The **Barrett** Company

New York Chicago Philadelphia Boston
St. Louis Cleveland Cincinnati Pittsburgh
Detroit New Orleans Birmingham Kansas City
Minneapolis Nashville Salt Lake City Seattle
Peoria Atlanta Duluth Milwaukee Bangor
Washington Johnston Lebanon Youngstown Toledo Columbus
Richmond Lenoire Bethlehem Elizabeth Buffalo Baltimore
THE BARRETT COMPANY, Limited: Montreal Toronto Winnipeg
Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.



ABOVE: Pierce Arrow Motor Car Co., Buffalo, N. Y. Gen. Con. American Construction Co., Boston, Mass. Roofers: Jameson Roofing Co., Buffalo, N. Y.



AT LEFT: Building at St. Mary's of the Woods College, Ind. Archt's: D.A. Bakken & Son. Gen. Con'ts: The Bedford Stone & Construction Co., Roofers: Terre Haute Roofing Co., Terre Haute, Ind.



ABOVE: Lamar Street School, San Antonio, Texas. Archt's: Adams & Adams, San Antonio, Texas. Gen. Con'ts: Wright & Sanders, San Antonio, Texas. Roofers: Turner Roofing & Supply Co., San Antonio, Texas.

AT RIGHT: Commonwealth Edison S.W. Station, Chicago, Ill. Archt's: Van Hout & Pyle, Chicago, Ill. Gen. Con'ts: McCarty Bros., Chicago, Ill. Roofers: Standard Roofing Co., Chicago, Ill.



BELOW: Plant of American Gas & Electric Co., Windsor, W. Va. Architects: Sargent & Lundy, Chicago, Ill. General Contractors: The Foundation Co., New York, N. Y. Roofers: Warren-Ehrst Company, Pittsburgh, Pa.



THE NATION'S BUSINESS

A Magazine for Commerce Business Men

VOLUME 6, NUMBER 11

WASHINGTON, NOVEMBER, 1918

What is Profiteering?

By DR. F. W. TAUSSIG

THAT is the question we asked Professor Taussig. What is profiteering? We considered him the best man in Washington to give the answer, since he has been a member of the Price-Fixing Committee of the War Industries Board, Chairman of the Committee appointed by the Food Administration to report on the Regulation of Flour Milling Profits and Prices, and a Director of the Sugar Equalization Board. He is well-known to our readers as chairman of the Tariff Commission.

Our letter to him and his reply, which is, of course, unofficial, are given here.

"My Dear Dr. Taussig:

"Scarcely a day passes that some of our readers do not write us with respect to war-time profits. So much has been said of profiteering and yet no one has had the temerity to define profiteering. Knowing your interest in this subject by reason of your connection with the War Industries Board, the Food Administration and the Sugar Equalization Board, I am writing for your opinion which you may be sure will be eagerly received by our readers.

Here is an actual case of a manufacturer whose business is under Government control to the extent that his maximum profits are limited and who is concerned as to his proper course. His case is so typical that I present it in full.

"What gives him concern is this. Should he operate his plant to make only pre-war profits or should he run it so as to make as much money as possible, providing, of course, that he complies with Government regulations and that surplus profits are taken by the Government in taxes. His feeling is that for the best interests of the country he should make as much money as possible under Government regulations, in order that the Government might have the advantage in the form of taxes. If, however, the Government believes this is not the best plan, his Company stands ready to operate entirely in accordance with the Government's wishes.

"This manufacturer in question has an unusually efficient plant and a low manufacturing cost. By reason of the efficiency

of his organization, he can manufacture more cheaply than can some of his competitors. Under the circumstances should he take advantage of this fact, or should he sell to the public as cheaply as he can, which would work a disadvantage to his competitors, and yet still pay a fair return on the investment of his stockholders. If he holds down his profits to a minimum consistent with good business practice, of necessity he reduces the funds from which the Government takes its toll in taxes.

"Your opinion on the proper course for this manufacturer and others similarly placed I assure you will be highly regarded. Yours sincerely,
Merle Thorpe, Editor.

My Dear Mr. Thorpe:

"I will assume, as a matter of course, that when a manufacturer, such as you describe, speaks of money-making, he has in mind success through the conduct of business with real efficiency. We should all agree that money-making which has the taint of unfair or illegitimate methods, is to be condemned. It is bad at all times; it is most bad in times such as the present. I am considering, as your correspondent surely is, successful operation in the sense of success

due to efficient management.

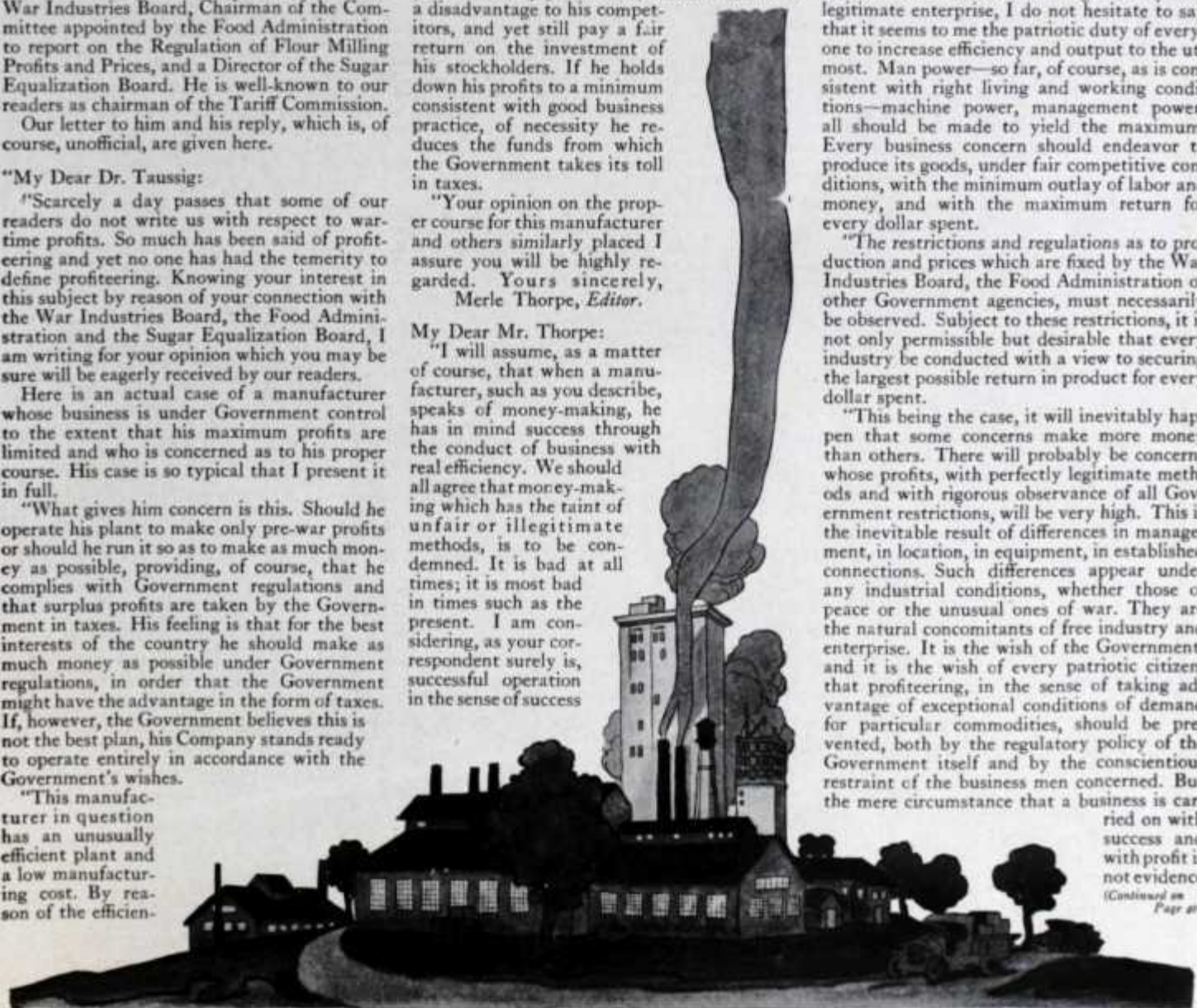
"Bearing in mind, then, that the only problem is the extent to which every business man and every business organization should endeavor to be successful through ability and legitimate enterprise, I do not hesitate to say that it seems to me the patriotic duty of everyone to increase efficiency and output to the utmost. Man power—so far, of course, as is consistent with right living and working conditions—machine power, management power, all should be made to yield the maximum. Every business concern should endeavor to produce its goods, under fair competitive conditions, with the minimum outlay of labor and money, and with the maximum return for every dollar spent.

"The restrictions and regulations as to production and prices which are fixed by the War Industries Board, the Food Administration or other Government agencies, must necessarily be observed. Subject to these restrictions, it is not only permissible but desirable that every industry be conducted with a view to securing the largest possible return in product for every dollar spent.

"This being the case, it will inevitably happen that some concerns make more money than others. There will probably be concerns whose profits, with perfectly legitimate methods and with rigorous observance of all Government restrictions, will be very high. This is the inevitable result of differences in management, in location, in equipment, in established connections. Such differences appear under any industrial conditions, whether those of peace or the unusual ones of war. They are the natural concomitants of free industry and enterprise. It is the wish of the Government, and it is the wish of every patriotic citizen, that profiteering, in the sense of taking advantage of exceptional conditions of demand for particular commodities, should be prevented, both by the regulatory policy of the Government itself and by the conscientious restraint of the business men concerned. But the mere circumstance that a business is carried on with

success and with profit is not evidence

(Continued on Page 21)



Linking Government and Industry

Business sets up machinery as point of contact and clearing house in handling war problems

By GEORGE N. PEEK

Commissioner of Finished Products, War Industries Board

I AM very glad to have the opportunity to outline a few of the things which I think a war service committee may be able to do, of help not only to the Government but to the retail industry and to individual concerns in the industry. The question that retailers want answered is: "How can we be of service?" That is a question that all real Americans are asking now.

In my mind there are three essential things to the winning of the war: men, munitions and morale. The men we have, and are getting as rapidly as they can be transported. The character of the men is such that it is needless for me to dwell upon that phase; I think the Germans, perhaps, can best tell about that.

In munitions, we are supplying not only ourselves but to a very great extent the Allies, particularly in the raw materials which enter into the construction of the munitions and we have now reached a situation in this country which none of us a year ago would have thought possible; that is a very great, dangerously great, drainage upon our resources. We have always thought of the resources of this country as inexhaustible and to a large extent they are, if we could build up a transportation system, furnish the man-power and the various other things essential to get at them in the time within which they are required.

In many lines of industry the supply available for domestic consumption is exceedingly limited. This means a very great shortage in many things and it follows in order to preserve the morale of the country that we must substitute for the law of supply and demand in the regulation of prices some rule of reasonable profits, either some arbitrary rule under Government direction or some co-operative rule which will prevail between the industry and the Government.

Where Money Would Count

SHOULD we reach a condition where all of the woolen garments, for example, were required by the Army, and the law of supply and demand was let alone, the only man who would be able to buy a woolen shirt would be the man who had the most money in his pocket, and I think that that would result literally in a riot from within our own country.

That is the kind of a problem which we have to face, and all men in business dealing with the necessities of life, particularly, must understand that situation and help meet it. I have no doubt about their disposition to meet it when once the problem is understood, but it is pretty hard to get that kind of an understanding throughout the country. There are many thousands, I presume, hundreds of thousands, of retail dealers and word must be gotten to

those men in order that their co-operation may be secured.

The retail merchants are in touch with the consumer, and it is a combination of the individual consumer that makes up our population, and it is to that population that we must appeal for this morale. So, I think it is perfectly clear, the responsibility that the retail merchants have in carrying this message and in doing their part. I believe that one class of our citizenship is just as patriotic as another; when

Representatives of the country's 40,000 department and dry-goods stores met in Washington, on October 3, at the call of the Chamber of Commerce of the United States and organized a War Service Committee of seven members to represent this trade before the Government. Creation of the committee was in general accord with the policy of the War Industries Board and a part of the general plan of the Chamber for industrial organization to meet war and reconstruction problems. The committee selected, after it is approved by the entire industry in response to a circular sent out by the Chamber, represents the trade in all matters having to do with fuel, and transportation, priority, etc. Its members are W. H. Mann, Marshall Field and Company, Chicago; George W. Mitton, Jordan-Marsh Company, Boston; H. J. Tily, Strawbridge and Clothier, Philadelphia; S. W. Reyburn, Lord and Taylor, New York City; Fred H. Rike, The Rike-Kumler Company, Dayton, O.; Oscar Webber, The J. L. Hudson Company, Detroit; and Francis L. Kilduff, La Salle, Illinois. The Chamber will proceed to organize other branches of the retail trade, forming a central committee out of the various committees named which will speak for the whole industry. The Government has in mind a number of measures which will be put into force after consultation with these retailers' representatives.

I say class, I mean the individual, because it is only the combination of individuals that makes the class.

Abnormal Profits the Rule

I BELIEVE retail merchants when they understand the situation will do their part; I believe the farmers, although they have been accused of lack of patriotism on account of not buying their proportion of Liberty Bonds, are going to buy their proportion and are going to do their part when once they understand the situation, but the message must be gotten home to them. We must get into the hearts of every man, woman and child in this country the sense of obligation to serve at this time; the profit is more or less immaterial. The first thing is to win this war and do it as quickly as we can.

There are other motives which should impel you to form a war service committee which may be in constant touch with the authorities in Washington that they may know how things are going and what to look out for. These motives may be purely selfish ones; we have all been doing business for the past two or three years on an advancing market. It would have been almost impossible to keep from making what I might term abnormal profits. Those profits are largely on your books; they come from your inventories written up at a higher price, perhaps, than you actually paid, which is quite legitimate, of course.

When the Market Goes Down

BUT we have been going on these advancing markets to such a point that I believe we have approximately reached the top. You are paying your taxes on the showing that you make in your business, but what are you going to do when the market goes down? Who is going to absorb the loss in your stocks at that time? Have you really profited very much from writing up your books when you have paid your taxes on the higher level and have no one left to reimburse you for that when the loss comes?

It seems to me if there was no other motive, if there was no patriotic reason for forming a war service committee, that self-preservation would compel retailers to do it and do it quickly in order that the situation may at all times be made known to all of the industries throughout the country that they may get their houses in order.

I sincerely hope that when the end of the war comes the declines will not come too rapidly, but certainly they are coming with the energies of almost all the world devoted to the development of supplies for the war. When the war stops, overnight

almost, what is going to become of that very great capacity which has been used to develop and furnish supplies for military purposes? If the decline is gradual we will have an opportunity to work it out. If we have organized industry we will have a better opportunity, because men can confer together and confer with the Government and perhaps under Government guidance will help meet the situation.

Two Big Problems

WE have two important problems. One, the furnishing of supplies for the prosecution of the war, and that is paramount to all others, but the next, and one nearly as great, in order to preserve the morale of the country, is to furnish the supplies with as little disturbance to the normal industry of the country as is possible.

We are going to have some industrial casualties. It is just as certain that there will be many of them as it is certain that there will be human casualties on the other side, but it should be the aim of all of us at all times to minimize those casualties just as soon as it is humanly possible to do so.

Russian-American intercourse has its delays, for perfectly obvious reasons. A letter dated at Moscow in February was delivered in Washington in September.

The Civilian

In its gigantic industrial operations the Government pauses to take notice of the little fellow and his market basket

By **BERNARD M. BARUCH**

Chairman, War Industries Board

THE War Industries Board is an executive agency established by the President for the purpose of carrying out the war program, and we are trying to carry it out with as little dislocation of the civilian needs as is possible. The war program has become so huge that there is no question but that it is impossible to carry it out and at the same time meet all civilian needs.

There is only one thing to do. That is to support the Army and to give to the civilians what is left. If that had not been done thus far the great successes that have crowned the American forces in their efforts would have been impossible.

The supplying of civilian needs is where we need the support, co-operation and advice of business men. It is a problem the government cannot solve alone, and business has to help us work it out. It is the problem of business to so distribute what is left after war needs are met, that the civilian population will feel that they have had a square deal.

That involves, of course, the question of

prices. But above all, it means equitable distribution of whatever is left. We have wrestled with this problem for a long time. I confess that we have not yet found a solution. The only one that seems feasible to me is to pass it on to business, which is what we call "passing the buck."

What Is a Fair Price

RETAILERS have a distinct job here. They can take a manufactured product from the manufacturer who, to some extent already has his prices regulated and his supplies distributed to him, and distribute it in a fair and equitable way, seeing that, as far as possible, each individual gets his share and gets it at a fair price.

When it comes to the question of what is a fair price, that is a very difficult thing to answer. I should say, roughly, that a fair price is a price allowing normal profits as in normal times. I know, of course, that retailers all say these are abnormal times. They are, but we have got to do abnormal and new things.

We are putting into effect a regulation for the distribution and control of shoes. After that we will have to make a regulation for the distribution of those other things which retailers distribute. These new questions will be taken up by the government with the war service committees the Chamber of Commerce of the United States is now forming in the retail trades. The retailers themselves will have to work the thing out.

Do not say that it can't be done, because it must be done. It is unthinkable that only the man with the longest pocket book can get the things he needs.

When we first came down here and the war started, Germany said, "It cannot be." Our answer was a million men on July 4th. They told us that we could not get munitions and we could not get into the war, and the world today knows our answer. I want to ask the business interests that are attacking this problem to go about it in the same spirit so that when it is said that it cannot be done, the answer will be "See—it has been done."



6) *Underground of Underground*

"The public is now as much a part of the Government as are the Army and Navy themselves; the whole people in all their activities are now mobilized and in service for the accomplishment of the nation's task in this war. We must make the prices to the public the same as the prices to the Government. Prices mean the same thing everywhere now; they mean the efficiency or inefficiency of the nation, whether it is the Government that pays them or not."—President Wilson on Price Fixing

Horn-Swoggling the Business Man

The Federal Trade Commission resorts to the conventional roorback when reminded that its bias, flightiness, inaccuracy and political itch are producing gold bricks instead of regulation twenty-karat goods

roor'back (roor'hak), n. Also, formerly **roor'bach**. A defamatory falsehood published for political effect. Webster's International Dictionary.

THE diverting tactics of the Federal Trade Commission in its reply to the committee of business men, whose findings were published in the last issue of *The Nation's Business*, will butter no parsnips. On the contrary there will be recognized in the particular sort of reply attempted that old friend of the politicians, known for half a century as the "roorback."

But the tactics, while diverting, will not hide the real issue. That issue is whether the country will indulge again in a picnic of badgering, harrying, and heckling American business, especially since the picnic in question is to be staged and directed, not as in the other case 20 years ago by sensational magazine writers, but this time by a federal agency, created to prevent that very situation, and which is supplied with 700 employees and funds from the public treasury.

In this direction lies the course of the Federal Trade Commission today, according to the committee of the National Chamber. That committee, composed of nine leading citizens without political, industrial, or personal bias, after following closely the Commission for three years pointed this out clearly. It presented its findings with annotated evidence from the Commission's own formal statements. It set forth seven specifications:

1. The Commission has undertaken the exercise of functions beyond its own jurisdiction to the detriment of its proper usefulness.
2. The Commission has begun the study of important situations but because of vacillating interests or for other reasons not apparent has left its work incomplete.
3. The Commission's procedure, originally orderly and appropriate, has changed without public notice or notice to Congress.
4. The Commission has abused its powers of publicity.
5. Prominent features of the Commission's recent food investigation were subversive of common justice.
6. In presenting information to Congress and the public the Commission has been heedless of the accuracy and frankness which its position and the circumstances require.
7. The Commission has departed from the fundamental purpose for which it was established.

Staging a Roorback

THE Commission staged its reply before a sub-committee of the Senate Committee on Agriculture and Forestry. Not one of the foregoing charges did it attempt to disprove. Instead, by innuendo, it essayed to show an unholy motive on the part of the men who marshalled the facts, facts that still remain unanswered. Running true to form, the Commission abused its powers of publicity. It sought to defame the men who exercised their prerogatives of American citizenship of fair

criticism of public officials. It did this by presenting a mass of half-truths and detached circumstances. At the same time by insinuation it tried to make it appear that a national federation of the country's business organizations had been created for ulterior purposes detrimental to the public interest.

The Commission set about to prove an hypothesis of its own by riveting attention on the fact that meat packers had contributed to the upkeep of the Chamber. But an official of the Chamber burst that bubble by pointing out the packers had contributed only \$9,000 in six years—less than one percent of all the funds obtained from nearly 500 industries.

The Commission refused, however, to be diverted from its hallucination by mere facts. It found that some banks which a year ago had loans outstanding to packing concerns had joined other business enterprises in contributing to the Chamber's finances during the period before it became self-supporting, and as much as six years ago.

The Opprobrium of Consanguinity

THE Commission's chairman earnestly testified, too, that one of the members of the Chamber's committee who had ventured to criticize the Commission is a director in a bank in St. Paul, which in June, 1917, lent money to a packer. The next day Chairman Colver corrected this statement (but not the implication) by saying the man on the Committee is the son of a director of a bank in St. Paul, which in June, 1917, lent money to a packer.

The correction, which displayed true Commission practice, of course never caught up the newspapers with the misstatement! But it served a good purpose. It was pat in that it furnished another example of the carelessness and inaccuracy charged as an item in the original criticism directed against the Commission.

Finally, the roorback went farther afield. If a packer, coal operator, or paper-maker has been judged guilty by the Commission, why complain as to methods used in convicting him before the public? Since guilty, any evidence he might produce would delay. Any cross-examination of the witnesses appearing against him would only be a waste of time. Why procrastinate with processes of law? String him up to the nearest tree!

* * *

TO fall into a somewhat slower method, it might be well to review the steps by which the conclusion was reached that the Commission is no longer a responsible body, industriously promoting the common cause of the nation, but that in its self-seeking it is creating discord, confusion, and disorganization.

Then

2. How the Commission's roorback was planned.
3. When statistical half-truths are better than whole-truths.

4. How such methods affect all business, big and little.

5. Where hard words (with disregard of hard facts) break no heads.

6. How four judges quietly gave the Commission a lesson in judicial procedure, and finally,

7. The big question for the plain citizen.

The Case Against the Commission

THE Chamber's Committee on the Federal Trade Commission, it will be recalled, had followed the Commission's activities since that body was organized in the Spring of 1915. In April, 1918, it had a meeting at which the members expressed concern about evident changes in procedure on the part of the Commission and decided to confer with the Commission for the purpose of ascertaining whether or not the Commission had intentionally changed its point of view. In June it had such a conference; stated frankly the criticisms it had to make; found members of the Commission, depleted until there were only three in office whereas the law contemplates the judgment of five, differed radically from the committee about the procedure required by the public interest which the Commission in important ways was directed by the law to consider; and in the same month, in accordance with its duty as a committee, placed before the Board of Directors of the Chamber a report in which it set out the position taken by the Commission and the contrary opinion of the committee on the score of interpretation of law and of public policy.

In other words, it was a report by a well-informed committee of long standing regarding the official acts of a public body in which all members of the public, under our existing form of government, are entitled to take interest. This report was received by the Board of Directors—being neither approved nor disapproved, since under the plan of organization the Board cannot express opinions for the federation of organizations that compose the Chamber—was sent to the President, and after a proper interval was distributed to the membership of the Chamber for exactly what it was—a committee report. At the same time, as is customary when reports are sent to the membership, either in referendum or otherwise, it was given to the press, in order that there might be no excuse upon the part of any one for garbled or inaccurate statements.

"Fixing" the Public Mind

SEPTEMBER 2 was the date when the report was made public. That a roorback was in preparation became evident even earlier; for on August 24, when the report had presumably been forwarded by the President to the Commission, a newspaper dispatch was sent from Washington, declaring that the Chamber of Commerce of the United States had "bitterly protested" to the President upon behalf of "big business."

How the Roorback Was Planned

ON September 17, however, the roorback was ready to be sprung. On that date a sub-committee of the Senate Committee on Agriculture and Forestry summoned the chairman of the Chamber's committee and a district secretary of the Chamber; announced it was conducting hearings upon a proposal which was introduced last spring to authorize the Government to take over the business of meat packing, and which had been resurrected for the occasion; and proceeded to make out the case which the Commission had tried to work up.

In short, the plan was, not to deal with the statements in the committee's report, no matter how important they might be from the point of view of public interest, but to diminish their force by alleging through innuendo such secret motives as would be dishonest in any persons who purported to be actuated only by the purposes of disinterested citizens.

To this end, the attempt was to suggest that meat packers had attained a special influence in the Chamber of Commerce through large contributions to its support in the formative period when dues of members were not yet sufficient to meet expenses, through the circumstance that some members of the Board of Directors are officers or directors in banks which at dates a year or a year and a-half ago had in their portfolios for investment purposes some negotiable paper bearing the signature of one or another concerns engaged in meat packing, and even because the father of one member of the Chamber's committee is a director in such a bank.

The second step was to make the report out as a protest by the Chamber—not a committee. The final step was to characterize it as a protest against the Commission's findings and recommendations about the business of meat packing as made public on August 8.

Statistical Half-Truths

IN view of the preconceived purpose for which this plan was devised, all facts which did not fit in with it were ignored, no matter how decisive they might be. The Commission itself did not lack information about the illogical nature of the scheme. Two months before the Commission's report on meat packing was made public, and on an earlier occasion the year before, the Commission had been told frankly by the committee of its point of view regarding the manner in which the Commission chose to perform its functions, and no amount of scanning of the report brought out anything other than an express and emphatic disclaimer on the part of the committee of any intention to discuss the merits of any case before the Commission.

Moreover, the first drafts of the report were prepared six weeks before the Commission's first report on meat packing was made public.

To intimate bias on the part of the Board of Directors, statistics were offered by the chairman of the Commission to indicate that at dates a year or more ago banks with which 5 out of a board of 31 directors were in one way or another connected had loans outstanding to packing houses, and to other industries in which owners of packing houses were said to be interested, to an aggregate of \$9,217,000.

The chairman did not continue his statistical excursion by adding that the aggregate loans and discounts of the banks he named were at the same time approximately \$500,000,000—a fact which would have broken any force in the innuendo by demonstrating the relative proportion of loans to packers—in the event loans to packers had any place whatsoever in the story. As a matter of fact of the five gentlemen in question, one is no longer a director and of the remainder but two were present at the meeting of the Board when the report was received. If the loans of the banks which were named had the slightest relevancy the other

IT is, perhaps, carrying coals to Newcastle to point out to our readers that in the case of the Federal Trade Commission the principle involved is far more important than the Commission itself, or its personnel, or the group of business men who made the investigation and report, or any individual business interest that has been the object of arbitrary treatment at the Commission's hands. The principle involved is as old as King Alfred—the right of a man to be heard before conviction. The plain citizen, too, has an interest in the question. For if such deviation from American ideals and American laws is permitted in the case of a single business enterprise, all business men, even down to the man who runs the corner store, are threatened. And in that direction lies national demoralization.

facts were equally pertinent.

But there were more statistical half-statements of like irrelevancy. Taking names from a list used in solicitation of subscriptions for the temporary fund which was used to tide the Chamber over its formative period, the chairman of the Commission worked out a highly ingenious and equally tenuous system of "interlocking directorates." By this process he arrived, as of a date in 1917, at another aggregate of \$37,527,351.50 in loans to the large packers from some sixteen or seventeen banks in several cities.

Thirty-seven million dollars is a round sum worth rolling under one's tongue any day, but there were greater gustatory pleasures to be had in this direction, if only the Commission's adding machines had been kept going; for the total loans and discounts of this aggregation of banks, with many of which the Chamber seems not to have so much as a speaking acquaintance, was \$1,702,000,000. A mere layman ruminating over these figures, and recalling that the census of manufacturers in 1914 showed the products of slaughtering and meat packing were about 6% of all manufactured products, might conclude on such a showing that the aforesaid banks were not lending a large enough proportion of their resources to the packers!

Such Practices Affect All Business.

BUT such a conclusion, like the Commission's total or the amount of packer's paper held in city banks or country banks, has nothing whatever to do with a plain, straight-forward, and unambiguous report upon questions of public policy which have no peculiar relation to meat packing and which are of personal importance to every business man—big or little, butcher, baker, or candlestick maker—who wants to be assured of a square deal from all competitors and from every man—the kind of protection the Commission was created to af-

ford. The probative force of the elaborate statistical calculations could scarcely have been perceived with Sam Weller's famous "pair o' patent double million magnifin' gas microscopes of hextra power," but the report was so plain that even he that runs may read.

Statements in the report which have not been questioned include that the Commission has become an instrumentality of unfairness in publishing formal complaints which set out serious allegations without giving the business houses affected an earlier chance to be heard, that it has waited for two and one-half weeks before correcting a gross mistake in its own statements regarding the profits of an industry, that it has never afforded the industries affected an opportunity to know the exact bases upon which it calculates their costs, and that it seeks to make itself a trade association for all industries in the country. These are examples of statements made by the Chamber's committee which stand uncontroverted by the Commission itself.

Where Hard Words Break No Heads

AT a few points the testimony submitted on behalf of the Commission came nearer to the committee's report. For instance, the portion of the report referring to the Commission's activities with respect to bituminous coal was characterized as not only not true but also as without excuse. This is strong language, but hard words break no heads and often go with disregard of hard facts. In this instance the unescapable facts were to be found in the public documents to which the Chamber's committee referred by chapter and verse. Not being altogether welcome, the citations were ignored. Upon being explored, they demonstrate that the Commission did not allow to bituminous producers the interest upon their investments in reserve nor the depletion that occurred to their property, but too arbitrarily substituted a "royalty" on each ton of coal mined.

Federal Judges Give a Quiet Lesson

THAT this method of arriving at the cost of producing coal was right or wrong the Chamber's committee did not undertake to say, but it pointed out that the method was arbitrarily employed, without being subjected to the scrutiny which the public interest required. That the Commission may be human enough to err in dealing with costs would appear from subsequent events. On September 25 four federal circuit judges declared unanimously that the Commission in placing at \$3.10 the maximum price at which mills should have sold newsprint paper on April 1, had allowed 40 cents too little. The same judges quietly indulged in a bit of instruction, for the Commission's benefit. They set out with particularity the method and the reasoning by which they reached their result, by implication asking all the world to observe and criticize. The Commission, on the other hand, in the award which was under review, omitted information about its method, merely gave general assurance that it had "considered all pertinent facts," and left the world to guess what facts might, in its opinion, be pertinent.

As for the Commission being prepared to deal with bituminous coal, testimony was given this spring on behalf of the Commission

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Priority After Peace Comes

Business couldn't "swing back to normal" if it wanted to
It must first master grave problems of peace-time resumption

By PAUL T. CHERINGTON

Harvard University Graduate School of Business Administration

OF five hundred industries affected by war conditions, consider one, say wool. When peace comes shall the supply of raw wool, now controlled by the Government, be thrown on the open market? Should the ensuing scramble between large and small mills and concerns be refereed? Is there anything to do for an industry without goods, without a market, and in ignorance of conditions? What steps can the industry itself take to forestall speculative abuses of both raw material and finished product markets? To win the war completely should not industries take up now the problems of resumption?—THE EDITOR.

DISCUSSION at this time of "Priority for industrial resumption" may seem premature. But just as we have learned that it takes longer than "over night" for a "million men to spring to arms" so we are learning that even the most clearly seen of visions takes time for realization. There is a vision in that expression which will be realized—and with time as a factor. Sometime—it may be in a few months, and it may be in a few years—the war will be over, and then the problems of resumption will be on us. It may be premature to discuss them now. It certainly will be too late to discuss them then. There will be too many pressing decisions which must be made, and in haste.

"Priority," like "allocation" and some other hitherto rare terms, has become a byword in these war days. Important industries have had the novel experience of figuratively standing in line and watching the freight cars or ship space or coal taken by some humble hewer of wood or drawer of water whom an august group of persons had said had "priority" over them. Of course, the people with priority liked it, and, of course, the others didn't. But probably, exceedingly probably, the public has fared better on the whole than if all industries had scrambled for a supply which all knew to be inadequate.

In any case everybody has grown accustomed to "priority" as a war measure. But so far they have not had time to think much about it in connection with the restoration of peaceful conditions. Not even that efficient Germany of the Teuton propagandists has completely figured out such a thing. There are no good precedents to go on. But that is no reason for

ignoring or neglecting it. Is it not conceivable that it offers an opportunity for outgeneraling our capable and calculating foe?

By the time peace actually returns, American industries for months, maybe for years, will have been on an abnormal basis. War Service Committees, the War Industry Board, and various groups of long-headed business men will have been working with the Government on problems of industrial and commer-

cial strategy. For a long time, as such things go, the aims of these industries and of the Federal Government will have been merged. The powers of both and all their capacity for achievement will have been pooled for the attainment of a common end. And then, all at once, perhaps, that end will have been accomplished. Will pre-war conditions be restored at once, or after a period of suspense?

The Government Can't Let Go

NOT all industries will be affected the same way, nor will any two be affected in like degree. But all of them will be more or less changed. And to simply say: "Let the government take its hands off, and business will spring back to normal" betrays a lack of grasp of the real situation. In the first place "business" is a thing too complex to be generalized

about safely that way. In the second place "the government" is now a party to many agreements from which it cannot take its hands—not would "business" be willing that it should. And in the third place there is no such thing as "normal" business conditions which can be sprung back to. We know nothing about business conditions after the war with certainty except that they will not be like those before the war. For every industry they will be different.

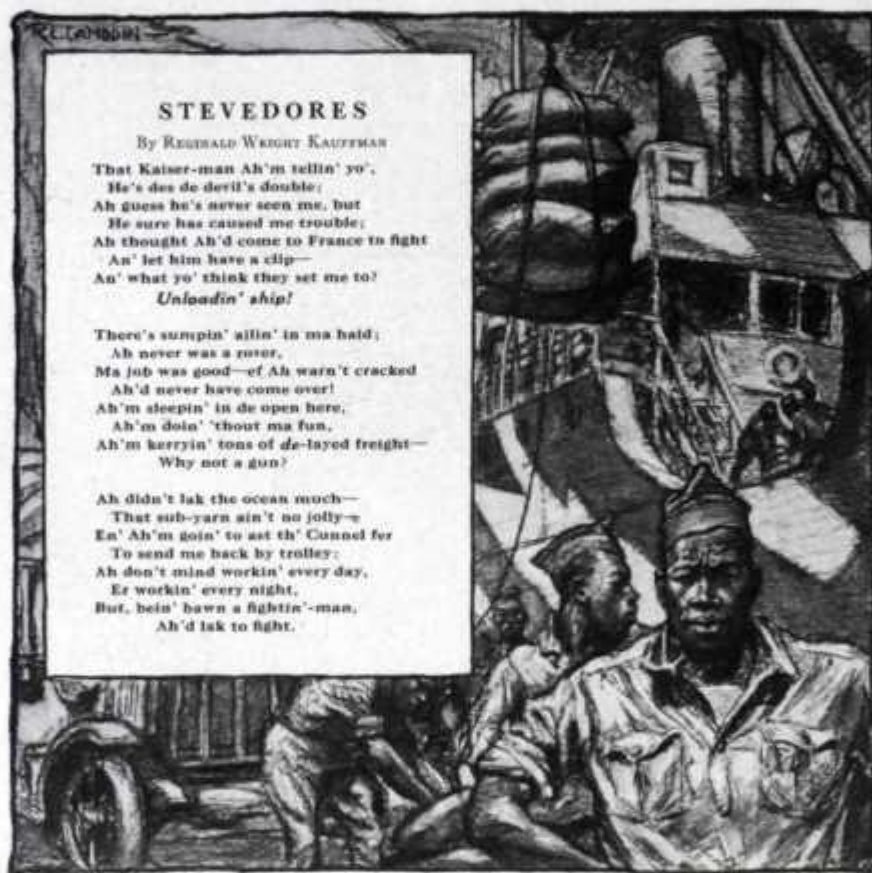
For instance, there is the woolen and worsted industry. For many lines of goods and for much of the producing capacity of the mills the Government has become literally "the market." The Government, moreover, has virtually commandeered the domestic clip of wool and practically all of the imported wools. In place of the "normal" methods of disposing of wools and worsteds have been substituted Army contracts with their advantages and drawbacks. Instead of the usual tasks involved in securing raw material by ordinary means there has developed a condition in which an order for cloth carries with it the wool necessary for its manufacture. Now, suppose the war should come to an end. Could the Government take its hands off? Would anybody want it to? Would this business spring back to normal? It is impossible to foresee all that would happen. But certain problems can be anticipated.

In the first place, there is the fact that the stocks of wool privately owned

are now being consumed, and an increasing proportion of the raw wool supply is coming into Government hands. Upon the cessation of hostilities, this wool would immediately cease to be of anything like the importance it now is to the Government. To be sure there would have to be clothing for the soldiers made and issued for some time to come, but the Army's consumption of wool fabrics would immediately be brought to a basis of strict current use. Much of the present necessity for anticipating needs beyond a period of a few months would cease to exist. In any case a substantial quantity of wool would at once be made available for civilian use.

In the second place, it seems highly probable that neither in quantity nor kind would the wool thus released be very accurately ad-

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STEVEDORES

By REGINALD WRIGHT KAUFFMAN

That Kaiser-man Ah'm tellin' yo',
He's des de devil's double;
Ah guess he's never seen me, but
He sure has caused me trouble;
Ah thought Ah'd come to France to fight
An' let him have a clip—
An' what yo' think they set me to?
Unloadin' ship!

There's sumptin' ailin' in ma haid;
Ah never was a rascal,
Ma job was good—ef Ah warn't cracked
Ah'd never have come over!
Ah'm sleepin' in de open here,
Ah'm doin' 'bout ma fun,
Ah'm carryin' tons of de-layed freight—
Why not a gun?

Ah didn't lak the ocean much—
That sub-yarn ain't no jolly—
Ea' Ah'm goin' to set th' Cannon fer
To send me back by trolley;
Ah don't mind workin' every day,
Ez workin' every night,
But, bein' down a fightin'-man,
Ah'd lak to fight.

The Southland's Nocturne a Saga of War

A new poem of the dreamy south—the Gulf's rim is ringing with a new and vibrant romance of building wooden ships

By MEIGS O. FROST



OUT of the South for the past two centuries the voice of Romance has called to America. Choruses of the cotton-pickers, chanteys of the rivermen on the levees, tinkle of the banjo from cabin-door and field of sugar-cane, songs of pirogue-borne fishers and hunters on the winding bayous, young voices rolling sweet and clear from the open windows of white-pillared plantation homes—these are the tones that have blent in the song of Romance that has lured from the depths of Dixie.

Still sing the cotton pickers, moving down the long rows of green and white. Freight still goes its way down the Mississippi to the tunes of negro deck-hands. The banjo strums yet from the shadows of moss-draped live-oak and rich green cane field. Plantation homes still echo to the ripple of young voices, despite the swiftly-growing lure of the Southern cities.

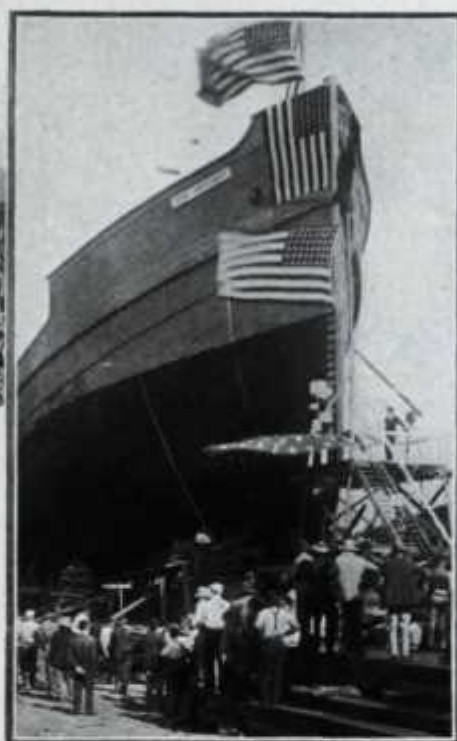
But out of the Southland today there swells a luring chorus of Romance, deeper, richer, stronger than the voices of the past. There's the resonance of ringing steel and seasoned wood in that chorus. At times it rolls with the measured beat of a host marching with banners. At times its melody has all the lift of fairy songs telling of marvellous deeds the work-a-day world deems impossible.

It's the Song of the Shipbuilders.

Coasting Schooner and Ocean Liner

ON wooden hulls and steel their hammers and riveting machines beat out a roaring refrain that carries—and carries far. Clear to Washington, where sit the men on whose shoulders rest the destinies of our soldiers, and the ships that are to bear those soldiers and their supplies across the Atlantic. Clear to that old chateau we know only as "Somewhere in France," where Pershing sat as he sent to America his plea for that Bridge of Boats. The bridge that is to span three thousand miles of swirling water haunted by the steel sharks of the Kaiser. The bridge that is to pour to our fighting-line overseas the men and supplies without which those million fighting Americans abroad would be but another burden on the Allies.

The shores of the Gulf of Mexico have echoed to that song since first the war came to America. From the Texas coast close to the Rio Grande's mouth, the whole round rim of



the Gulf has sprouted shipyards as a Louisiana swamp sprouts water hyacinths. Every type of wooden ship from the little coasting schooners up through the ranks of the big 2,700-ton auxiliary power five-masted schooners that have taken over the bulk of the Gulf trade in war-time; up through the ranks of the 3,500-ton Ferris model wooden steamers; clear up to the big 5,000-ton Ebsen-Daugherty type wooden steamers, that have improved on the Ferris model and have won the contracts of the Emergency Fleet Corporation—that's the gamut that the South's builders of wooden ships have run under the spur of a nation's war-time need.

And in the building of those staunch wooden ships lies buried a tale of energy and resourcefulness that may never be told in its entirety.

Always the South has built ships of some sort. In 1822 the histories recount that "at the two villages of McDonoghville and Duvergesville, just across the Mississippi River from New Orleans, shipbuilding is carried on and a number of vessels are always harbored." Throughout the years since earliest colonial history, Louisiana has been building her own schooners, squat wooden hulls of sturdy timbers, ploughing through the waves in quiet weather, riding over them when storms came, bearing their cargoes of lumber, sea-food, farm produce, cotton, rice and naval stores with workmanlike regularity up and down her waterways. Out onto the Gulf they ventured from time to time, trading until the foundations of a great Gulf commerce were laid more than a century ago.

Where they learned to build those schooners, no man knows—no history records. Least



of all can the builders, shipbuilders of the fourth and fifth generations, tell whence their fathers learned their craft. Like the wonderful stone-laying art of the Quiche masons who raised the temples of Chi-Chen-Itza, or the ancient Mixtecas below the Rio Grande who left behind the amazing stone palace of Milta, they "always knew how."

And that was the South's nucleus of shipbuilders on which the Emergency Fleet Corporation had to lean as a staff when the war-time cry of "Ships—ships—more ships!" rang through America.

To the glory of the South's shipbuilding craft—to the glory of men who knew how to organize and train and work man to man with their working force—the shipyards of Dixie answered that call.

It's a Dual Romance

THIS is not a tale of the South's steel ships, though the Foundation Company at New Orleans has already launched its yard where 9,500-ton steel craft for the Shipping Board are being built. Nor of concrete ships, though a site for this type of marine construction has already been laid out at the New Orleans industrial canal ship-basin. The steel and concrete ship-building of the South is a saga by itself.

But of the wooden shipbuilders—Romance is woven in the warp and woof of their day's toil as in no other activity today below the Mason and Dixon line. It's a dual romance. The romance of modern craftsmanship in a setting quaintly and wonderfully rich with historic memories—the romance of a South that once fought the North and is now working side by side with it for the nation they both form—and that other 1918 romance—the romance of men meeting obstacles seemingly insuperable, and surmounting them with a joyous laugh that makes light of their amazing feats.

Take, for instance, "Silent" Daugherty. He signs his checks A. A. Daugherty—but at Orange, Texas, where he made a ship-yard of eight ways to rise in eight months from a waste and inundated swamp by the bank of the Sabine River, few know him save by his eloquent nick-name.

His home? "Oh, California—New York—

London," he grins. He has resided there, and nearly everywhere else. Irish? Another grin, and the stout assertion that he's Pennsylvania American—four generations.

When war broke out, Daugherty had some oil interests in Tampico, Mexico. He needed tankers. Ships were priceless. He couldn't buy them. He started to build his tankers. Steel was unobtainable. He designed a wooden tanker—first to get a rating at Lloyds in all maritime history. Then came America's call for wooden ships. Those four generations of Americans sped to the fore. Daugherty summoned his working partner, one W. A. Ebsen of Philadelphia, genius in ship and propeller design.

Daugherty and Ebsen studied the Ferris model plans. Jointly they opined that the model could be improved. Some of the Ferris specifications called for huge timbers of Douglas fir—gigantic dimensions that spelled Oregon and ruinous railway hauls. Yet Orange, Texas, was close to the unlimited fields of Louisiana pine, was on the Sabine River and opened to the Gulf at Port Arthur.

So Daugherty and Ebsen designed a "laminated construction" wooden steamship that spliced the Southern pine timbers with oaken treenails, required 250,000 feet less lumber than the Ferris model, and carried 4,700 tons against the Ferris model 3,500 tons.

Those circumstances gripped that swamp waste acreage by the Sabine River, took a nucleus of eight trained men, and started work. Throughout Texas, Daugherty sent the call.

College students, floating labor, journeyman carpenters, men rejected of the army but anxious to serve, cowboys off the ranges, swarmed into Orange.

Cowboys? This is literal truth. Luke Haley, ranch foreman in Central Texas, with his "bunch," rode their cowponies up to the big gate of Daugherty's shipyard—the National Shipbuilding Company of Texas—tied those ponies there, applied for jobs, got them, and went to work still wearing boots and spurs, broad-brimmed white Stetsons and "chaps."

With the launching of that first Daugherty-Ebsen ship, Luke and his "bunch" watched the big "War Mystery," purchased by the Cunard, glide from the ways and plunge into the Sabine.

"Dawg my cats," quoth Luke, as he watched the big hull lurch and rip through the water, "I'd shore hate to try an' rope an' hawg-tie that hussy."

Out of that scrambled lot, leavened with eight good workmen, Daugherty welded together a hard-bitten, efficient working force of 1,400 men, drawing down \$48,000 a week on the pay-roll and sending one 4,700-ton steamer into the water every eight weeks—faster than the railroads could haul their equipment to Orange. But the work wasn't advertised. Not by "Silent" Daugherty.

"Believe me," said he to the writer, "this gang is hundred percent American. The man in overalls is the backbone of this man's nation. So long as he gets a square deal, America needn't worry. He'll work or fight or do both."

That's the basis on which he's running the company that has built the *War Mystery* and *War Marvel* for the Cunard—that is building 28 more sister ships for the Emergency Fleet Corporation.

To Daugherty's "gang" came word from a certain California shipyard that the great ribs of a 4,700-ton wooden steamship had been set up in the ways, ready for sheathing, in 45 hours. Three days later came the word that this record had been reduced to 35 hours. Daugherty passed out the word to the "gang."

"Do we let these California guys get away with it?" he asked.

The gang straightened up its collective back,

"I'd like a look at the blue-prints," said a correspondent to Daugherty at a time when four of his ships were afloat, two ready for launching, and others swiftly nearing completion.

Daugherty grinned again.

"D'you know," said he, "I'm going to have a hell of a job getting those blue-prints finished for the Cunard a month or so after their first ship sails. The Hog Island crowd hired out my drafting-room force right over my head. So we've just gone ahead and built the ships without worrying about blue-prints. Solved our problems as they came up, you know, and made rough sketches as we went along."

And that's the way the biggest wooden steamship ever built in the New World went to the water. She's in England now. Built in manners uncharted of precedent—but doing the work.

The Inmost Heart of Romance

COME nearer New Orleans. Out across Lake Pontchartrain, where jade water and blue sky blend in a hazy line of delicate mist, there's an inconspicuous opening in the lake shore. Up through that opening you steam, following for a mile and a-half the windings of the Tchefuncta River. Then, suddenly, as you round a bend, a vision reaches out and grips you.

Banked in towering oaks from which sway the gray beards of the Spanish moss, sharp-etched and clear against primeval forest and sky-line, clean and strong and white in the Louisiana sun, stand the hulls of four 3,500-ton ships in the ways. Ferris models, all. Building by the Jahneke Shipbuilding Company of New Orleans, in their yard at Madisonville.

July the Fourth saw the first completed ship of the yards, the "Bayou Teche," plunge from the ways in the big national "splash." On one side of Commodore Ernest Lee Jahneke, head of the corporation, stood his little daughter, Adele Stanton Jahneke, the sponsor. On the other side stood his small son, Frederick Stanton Jahneke.

They are granddaughter and grandson of Edwin

Stanton—secretary of war in the cabinet of President Abraham Lincoln. But the grandchildren of one of the South's

best-hated foes in the '60's blent their shrill treble in the cheers as, her bow dripping the traditional champagne, the *Bayou Teche* dove into the Tchefuncta

from smoking ways.

Not another shipyard in the United States stands on ground saturated with the romance of ante-bellum America as is that yard on the old Tchefuncta River. The site of the whole plant is the incredibly old Le Sasser plantation, founded when Louisiana was a French colony. Where once stood the slave quarters of the Creole aristocrats, now rise the neat cottages, dormitories, dining halls and movie theater of the workers. Where cotton and cane fields sloped once toward the river, now the big wooden hulls point stern-first at the Tchefuncta, just as they slide off the ways. Where



The specifications called for huge timbers of Douglas fir—gigantic dimensions that spelled Oregon and ruinous railway hauls. But close at hand and within easy haul were unlimited fields of Louisiana Pine. And at every turn posters charged the lumberman that every swing of the axe was as a shot from the trench. Oaken treenails spliced the Southern timbers and the product of the South's new dream was ready to plough the roadsteads of distant ports.

bent from labor over piles of Southern pine, spat reflectively into the piles of chips and shavings, and meditated.

"We do not," answered the spokesman.

Within 30 hours and 35 minutes from the time they laid hand to timber, the 76 huge ribs of a 4,700-ton wooden freighter stood in the ways, bolted, braced and ready for sheathing.

It's a world record. Eight months before, not one of that "gang" knew a stern-post from a keelson.

furrows once were ploughed with the "befo' de wah" agency of nigger and mule, now are piled huge stacks of Southern pine and oak, each one of the thousands of timbers sawn to pattern, each marked with its specific destination somewhere in those great hulls. Where the plantation blacksmith once hammered out his crude repairs, now huge bandsaws shrill and scream as they cut their way through logs unnumbered.

But the Madisonville offices of the Jahneke Shipbuilding Company! Never a shipyard in

America has its home in such a structure. It's the old Le Sassier plantation home. The wide rooms that once echoed to courtly Creole French, to all-night bouts at cards and wine-glasses, now echo to the click of typewriter and the shrill of telephone bell. Logs still burn in the massive stone fireplaces when the days are cool. Talk of crops on the broad galleries is supplanted now by talk of draught and horsepower.

Romance? Travel from here to the winding

channel of Bayou Boeuf, which is 81 miles from New Orleans and a million miles from hustling American life. There, up to the time Uncle Sam called for ships, floated the great pastures of water hyacinths—purple-starred flowers set in their waxy green leaves. With acres of quiet beauty those hyacinths have paved Bayou Boeuf from time immemorial. From the levee at Morgan City visitors were wont to gaze at them as they would gaze at a

(Concluded on page 32)

STEEL:

The man who decides what your share of this precious metal shall be tells you here why your consumption is limited and what you may expect in the future

By J. LEONARD REPLOGLE

United States Steel Administrator

THE whole of the nation's business is to win the war. We are told many ways for doing this; many things which will "win the war," but in the writer's opinion when that all-desirable result shall have been accomplished and the principal contributors are carefully considered, steel will be "among those present."

There are few important factors in either defensive or offensive warfare into which steel does not enter directly or indirectly. Food supplies for our own and Allied forces and civilian population must be produced and transported in enormous quantities; agriculture in the belligerent countries necessarily has become secondary to the defense of homes against the ravages of the Unspeakable Hun, and the burden of the Allied food supply is one of this country's many problems.

To produce sufficient food to meet the necessities, even after all proper conservation measures have been adopted, increased production is essential. This requires vast tonnages of steel for agricultural implements and probably one million tons of tin plate for the canning

industry. The old motto of the farmer: "We eat what we can and what we can't, we can," has been changed by Mr. Hoover to "Eat what you must and what you can, can."

The transportation of this food and other enormous war supplies put such a burden on the transportation companies that they almost ceased to function in the early part of this year. Important war industries were idle; our war program was seriously jeopardized and government control resulted. In conferences with all manufacturers of pig iron and practically all producers of finished steel products held in Washington recently, we developed the very remarkable fact that at none of these plants is transportation now the limiting factor—that production at no plant is delayed on account of inadequate railroad facilities.

To effect this wonderful improvement, new locomotives and cars were needed and 100,000 cars and 1,500 locomotives were promptly ordered; these required almost two million tons of steel. New terminals were an absolute necessity; millions of tons of rails were required. Ships, more ships and still more ships were

demanding. The yards were not here; they must be created and this required a vast tonnage of steel which was promptly furnished.

The completion of the yards does not solve the steel man's problem. Hundreds of thousands of tons were needed to construct the yards and ways; millions of tons are necessary to operate them to capacity and the submarine activities of our terrible enemy necessitate every yard being operated to maximum capacity. Estimates of ship construction and steel consumption were prepared by the Emergency Fleet Corporation; the steel asked for was furnished almost to the ton demanded, but owing to the enthusiasm, energy and determination injected into the shipbuilding situation by Messrs. Schwab, Hurley and Pier, operations even exceeded their expectations and "steel, more steel and still more steel" was the cry. This is now being supplied in the quantities demanded.

In pre-war times, a few thousand tons of projectile steel sufficed this peace-loving nation with the result that no mills were especially designed for or entirely operated on this character of work. Millions of tons of this steel, which will be shipped into Germany via the mouth of our



(U) Underwood & Underwood

Here's the other side of the steel conservation story. Steel relinquished by makers of refrigerators, beds, stoves and various tools, is making its appearance in the war zone in destroyers, locomotives, armored trucks, airplanes, and tanks, and is being shipped direct into Germany via the mouth of our big guns on the western front.

big guns, are now being made on rail mills and heavy structural and bar mills. Our requirements in sheet steel runs high in the millions of tons—more than double the normal requirements of rails, which, before the war, were considered the barometer of the steel industry. Forging and machining plants had to be erected to forge and machine this steel which is playing such an important part in this great fight to "keep the world a decent place in which to live." The steel has been provided, the plants are operating and producing in vast quantities.

Our wonderful navy, which has achieved results which have astonished the world, demanded enormous tonnages of steel for destroyers, submarine-chasers, bombs and ordnance of various kinds. They "want what they want when they want it," and it has been supplied to their satisfaction.

Aeroplanes, guns, armored motor trucks, cantonments, tanks all require steel.

The steel requirements of our Allies take many millions of tons and their demands are increasing at an enormous rate. The enemy had invaded and occupied a very large percentage of the coal and iron mining and steel-making districts of France and Belgium—there was only one place to make up this deficit—the United States. England, France and Italy

are calling for millions of tons for their military programs and this is being supplied to their satisfaction. Japan furnishes ships in exchange for steel. The retreating Germans take with them all the rails and equipment possible, destroying the rest. General Pershing wants hundreds of thousands of tons of rails, cars and locomotives. We are all agreed that he is entitled to what he asks for.

Individual Interests Not Considered

IT was long ago recognized by the War Industries Board that with such demands upon us for steel in quantities and of the high average quality never before produced, that business could not be "as usual." Priority was necessary and under the authority conferred upon him by the President of the United States, Mr. Bernard M. Baruch, Chairman of the War Industries Board, created an efficient organization within the Board to handle the very delicate subject of Priority, which necessarily means discrimination. It has been Mr. Baruch's policy to call the representatives of the various industries affected to Washington for a full and frank discussion of our problems and the methods necessary to overcome them and it has been a source of gratification to Mr. Baruch and all members of the Board that, with practically no exception, the representa-

tives of such industries, after a full realization of the necessities, patriotically and enthusiastically agreed to accept the restrictions and modifications required of them and agreed that individual interest must be subservient to the national welfare.

The total demands for steel for direct and indirect war necessities exceeded twenty-two million tons for the last six months of this year; whereas the reasonable expectations for production was probably eighteen million tons. Steel manufacturers, appreciating the necessities of the occasion, set themselves to the task with the most wonderful enthusiasm, energy and determination. The record production of plates in this country in 1916, which was by far a record year up to that time, totaled 3,684,000 tons. In 1917 four million tons were produced. Our plate mills are now producing at the rate of six million tons annually, or almost forty thousand tons each week in excess of the record production of last year. Liberty plate mills have been put in commission and workers generally appreciate that all plate mills are "Liberty Mills" and their work is sufficient answer to the demands of the American people that "the least we should do, is all that we can do" to give our gallant fighters the materials necessary to achieve a decisive victory in this greatest and most terrible of all wars.

Work or Fight!

Misapprehensions concerning this celebrated Draft Order from the Provost Marshal General's office are cleared up here for business executives

By COL. CHARLES B. WARREN

Senior Officer in Administration of Draft under General Crowder

THE Selective Service Law, approved May 18, 1917, provided that under rules and regulations prescribed by the President, "those in a status with respect to persons dependent upon them for support which renders their exclusion or discharge advisable" might be given temporary discharges or deferred classification. This provision of the law was based upon the theory that men without dependents should first be called into the military service.

The Rules and Regulations prescribed by the President for the administration of the Selective Service Law provided for the deferment in Class 2, 3 or 4 of persons having dependents, the extent of the deferment depending upon the nature of the dependency of the persons alleged to be dependent upon the registrant.

So far in the administration of the law, persons who have been given deferred classification on the ground of having dependents have not been called. They remain subject to call in case the requirements of the military establishment demand a larger force than can be furnished from Class 1 men; that is, from men who have not been given deferred classification on any ground.

The fact that so many men were given deferred classification on the ground of having dependents, gave rise to what the public has chosen to call the "Work or Fight Rule." The theory of the Work or Fight Rule is: If a registrant has been given a deferred classification on the ground that he has dependents, the Government says that in order to continue to enjoy his deferred classification he must step

out of certain employments for the time being and take up work more necessary to the prosecution of the war. The Work or Fight Rule therefore, furnishes a method of transferring a large body of men engaged in certain employments to other employments deemed more important in the emergency. If the registrant does not change his employment he loses his deferred classification and becomes subject to immediate call into the military service.

When the rule was issued to the Boards administering the Selective Service Law, a concise definition of the occupations in which persons who had been granted deferred classification could not be engaged was promulgated. The occupations specifically prescribed were:

Persons engaged in the serving of food and drink, or either, in public places, including hotels and social clubs;

Passenger-elevator operators and attendants; and doormen, footmen, carriage openers and other attendants in clubs, hotels, stores, apartment houses, office buildings, and bathhouses;

Persons, including ushers and other attendants, engaged and occupied in and in connection with games, sports, and amusements, excepting actual performers in legitimate concerts, operas, or theatrical performances;

Persons employed in domestic service;

Sales clerks and other clerks employed in stores and other mercantile establishments.

What Is a Sales Clerk?

RETAIL merchants are vitally interested in the interpretation being given to the words "sales clerks and other clerks employed in stores and other mercantile establishments."

The Government has not decided that a sales clerk is not a legitimate occupation but has decided that it is easier to make a shift of a large body of men so engaged than to make a shift from some other occupations, and that men who have been given the advantage of deferred classification because of having dependents must, if they are sales clerks or other clerks employed in stores and other mercantile establishments, change their employment during the war.

It is interesting to know that at the time of the promulgation of this rule the Boards administering the draft law were given an instruction defining the meaning of this section of the Rules. The instruction was:

Paragraph E of Section 121-K does not include store executives, managers, superintendents, nor the heads of such departments as accounting, financial, advertising, credit, purchasing, delivery, receiving, shipping and other departments; does not include registered pharmacists employed in wholesale and retail drug stores or establishments; and does not include traveling salesmen, buyers, delivery drivers, electricians, engineers, carpet-layers, upholsterers, nor any employees doing heavy work outside the usual duties of clerks.

It is our opinion that this instruction for the guidance of the Boards permits any retail or wholesale store or mercantile establishment to keep its organization intact. The important men will generally be found to be the store executive, manager or superintendent, or the head of a department. The men occupying other positions can be replaced by those physi-

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Food Production Is In Abundance, While High Prices Continue the Theme of Discussion

By ARCHER WALL DOUGLAS

MAP changes from the October issue all show improvement and are due entirely to abundant precipitation in the drought-stricken districts. Early corn, not entirely gone, was greatly benefited, so that the total yield will be about 2,800,000,000 bushels. It is of unusually high quality, and is practically all merchantable. The damage by frost was comparatively small. Cutting of corn for silos is completed, and much of the land thus released is being sowed in wheat.

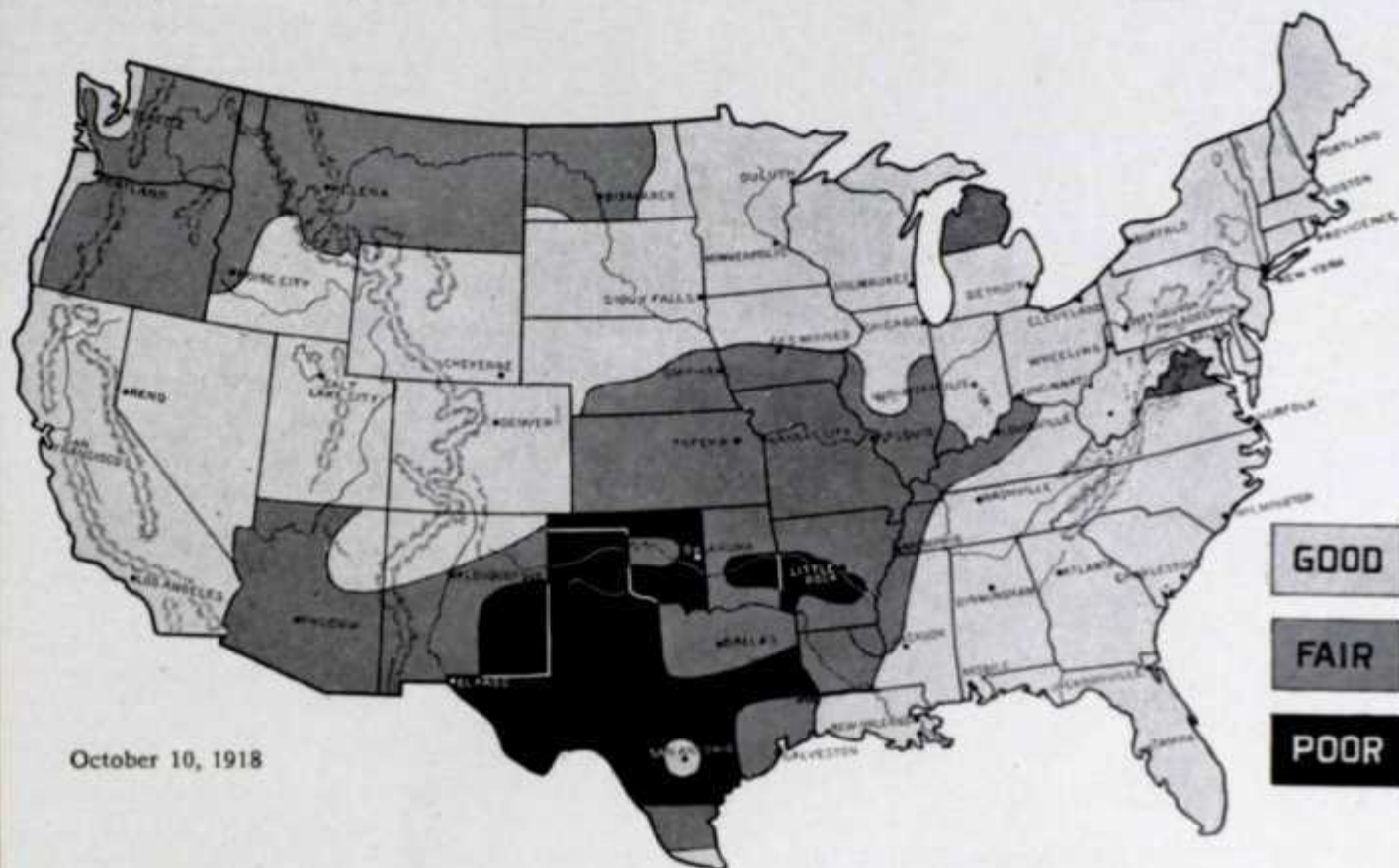
Threshing returns indicate one of the largest spring wheat crops ever harvested, and a combined winter and

Arkansas Rivers and in some sections of Texas, Oklahoma and Louisiana.

The citrus crops of Florida and California give promise of a materially larger production than last year.

The yield of apples is greater than in 1917, with New York State playing the lead with about 41,000 carloads and Washington second with 17,000 carloads.

The food production of the country is in great abundance despite the usual hysterical Jeremiads of woe from alarmists who have scant knowledge of the actual situation.



spring wheat yield of between 925,000,000 and 950,000,000 bushels, probably nearer the former than the latter figure. Planting for winter wheat goes on steadily, and the early sown wheat is already up.

Favorable weather has given cotton one of its numerous recoveries from its equally numerous relapses, and the indicated yield is not far from 12,000,000 bales, or larger than for three years past. There is practically no top crop. Picking and ginning are proceeding rapidly under the incentive of continued high prices. One result of the relentless eastward and northward advance of the boll weevil is the steady decrease in the production of long staple cotton along the sea coasts of Georgia and South Carolina. It is a slow-maturing species and consequently most vulnerable to the depredations of the boll weevil. The principal production of long staple cotton in this country is now in the irrigated districts of Arizona and Southern California. It is also grown in the "Delta" regions of the Mississippi and

Other than wheat and rice, only a comparatively small proportion of the yield of most grains is used directly for human food in this country. The great demand from abroad for food makes conservation both a wise and necessary measure in some products. So the Food Administration, with its usual good sense and grasp of the situation, has indicated in which directions conservation is most needed. Moreover, we are thus learning permanently the error of our previous notions that waste and generosity, conservation and penury, were synonymous terms.

The business world is feeling more and more acutely the steadily tightening grip of war's necessities. The volume of domestic business is being bitten into here and there by the almost complete cessation of certain activities, such as building, construction, and out-door sports, and by increasing difficulties in getting goods because of steadily growing Governmental demands. Both the assortments

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Rail, Water and Road

These three, and the greatest of these is—all three; for no one can be truly great without the other two. *An unusual contribution to the philosophy of transportation*

By WILLIAM C. REDFIELD

Secretary of the Department of Commerce

THE transportation system of the United States is not a unity. It cannot be run on what we may call unitarian lines. It is a trinity, and has to be run on trinitarian lines. You must link up railways and waterways and highways to get a perfect transportation system for this country.

If there were no railroads we would have little transportation. If there were no waterways there would be insufficient transportation. If we had an abundance of railways and waterways and lacked the use of highways, we should have imperfect transportation. We should fail to bring it to every man's door, and it must be brought to every man's door to be perfect.

The early transportation in the Hudson River Valley was by sloop. The history of the river is full of the traditions from the old sloop days when it was sometimes five and sometimes nine days from New York to Albany by water. The river was just as navigable then as it is now; the difference lies in the tool that was used.

Now in that use of the fit tool for the route lies the whole truth in transportation, and yet so far as I know the full bearing of the application of the tool to the job is almost new to our discussions of the several phases of transportation.

In due time comes Robert Fulton and the *Clermont* begins to flap-flap her weary 36 hours from New York to Albany. A new tool, but the same route. In time she passed into a more modern type. The steamboat developed, and came the canal with its mule power. How strange it seems in these days to think of mule power ever having been considered. Yet I have in my possession a letter to the constructing engineer of the Erie Railroad, urging that it should be operated by horses between New York and Buffalo and giving ten very excellent reasons why horses were far better than steam locomotives could be.

It took a lot of argument to keep the horses off the Erie Railroad.

Came the steam locomotive. Now the rail was not new any more than the river was new. The railroad or tramway in England is far back, earlier than the railroad in America. There were tracks laid many years before anybody thought of a locomotive engine. The invention lies not in the railway but in the tool put upon it. Again the principle of the tool to the job. Also a new principle that the way, whether it was waterway or railway or highway must adapt itself also to the most effective kind of tool that could be put upon it. You could apply it but partially to the river.

When canals came along later, it became apparent that you must not only have the best tool for your waterway, but must suit the latter also to the tool. We understand this about railways; we have not been so clear about it as to waterways and highways.



It is within two years that the governor of a great State has suggested to me that the use of large motor trucks be forbidden because they destroyed highways.

I ask you if you will warrant the removal of locomotive engines because they are made too tons heavier and would break the light rail made 40 years ago? The problem is a duplex one. The best tool must be had for the job and the opportunity must be provided for the tool to do its work.

So the railway came along and since the mechanical engine fitted so perfectly into the American temperament and the national need, the railway and the tool for the railway de-

veloped together side by side. Still with the coming of the railroad we thought of transportation as a unity. Highways did not amount to very much. Men went by horseback often because they had to, not always because they wanted to. And after the railroad came, the waterway was all but destroyed, because we thought of transportation as a unity of railroads. Up to a very few years ago, all of us who are not far-seeing would have thought of public transportation as meaning essentially the railroads.

The public authorities, as well as the farmer, must learn that the most costly thing in the world is a bad road, that as compared with sealskin furs and platinum, mud is far more costly an item, and that there is no such evidence of a muddy state of mind in a community as a muddy state of highways in the community. They go together—mental and physical mud.

Yet so rapidly in the last five years has the law of transportation been developed that it is a little bit difficult for us to keep up with the

rush of this movement.

There came into the world a new tool; the internal combustion engine, destined to work almost as great a change in the human life as the steam engine in its time, making possible a tool for the waterway that the waterway had never had before, making it possible to use for the highway what the highway had never had before, making necessary the alteration of the highway to suit the new tool built for it. It has never been true until now and it has just now become true that the waterway and highway have been, as regards the tools for their use, on a technical and scientific level with the railway.

The Government is just putting in operation this month the first great barges for the Mississippi River, intended to carry ore South and coal North, made possible because of internal combustion engines. The tool has come, the internal combustion engine is altering the face of the marine world. So that we do not really need over six feet of water in the northern Mississippi to carry 1,800 tons of ore in one boat.

We look upon the development of the New York State barge canal with a certainty of its profitable use for the nation, for with a 12-foot draft we know we can carry 2,500 tons in any vessel constructed for the purpose, driven by internal combustion engines. The tool for the job and the way made ready for the tool.

I go into my shop to put up a hammer. What is the essential feature of my hammer's operation? The foundation. It may be the most powerful hammer made, but unless given a sufficient sub-structure, it can only be destructive. So for the waterway, so for the highway. You may have the most perfect equipment for their use, but the instrument must work in a proper environment. So the waterway then, the last few years, in fact very, very recently, has come rapidly into its own.

It is within 18 months that I stood upon the first load of ore going south on the Mississippi River and saw it enter the port of St. Louis. It was only the other day I sent to the Senate my formal report urging Government ownership and operation of all the

northern coastal canals from North Carolina to New England, with the certainty that adequate and efficient vessels could be provided for their use.

Now these three ways of transporting developed to their full, are not hostile to each other. In the days of our ignorance we thought they were. In other times the railroad bought canals to suppress them.

But we have learned a larger outlook now and the congestion so recently as a year ago taught us that there are certain kinds of goods, certain types of transportation, that the railways of this country cannot afford to do. Certain great items of bulk freight, they must al-

ways carry. We should starve for steel if we had to depend upon our railroads to bring the ores from Minnesota to Pittsburgh, and the Northwest would be in a hard case if we had always to send coal to them by rail from the region of the East. We are learning that there is a differentiation in transportation.

Interlocking Service

SO these two enemies of the past are likely to operate as friends today. It is not a chance thing that the internal waterways of the country are at this time being operated by the Railroad Administration. It means an advance in thought.

I told the Director-General of Railways that two-thirds of the job was fairly well in hand but that he had left out one-third, and that I thought he would not get his unity complete until he made it a trinity by taking in the highways. I told him that the highways as a transportation system and their development both as to roads and as to means of using the roads were quite as essential to the country as the other two. In reply he suggested that it was a larger job than he himself could undertake, with the railroads and the waterways on his hands, and asked me if I could not do it. To my regret I was obliged to refuse. The law does not give me authority. I should have been glad if I could have had more of a part in it, because given your perfected railroad, and I speak as a friend of the railroad, and as a friend of the waterway, which I think is also coming into its own, I am convinced that neither will reach its normal place as a servant of the people unless linked up with motor truck routes.

There is a steamboat line running from New Haven to New York. At New Haven, lines of motor trucks radiate out in several directions. From this radius around New Haven for many miles in three directions the motor trucks come down in the evening to the boat. The boat leaves a little before midnight and arrives in New York in the morning, when the freight is transferred and goes out on the early trains for the West. It is a good system of interlocking service such as we have got to have.

My conception of the future of the New York barge canal and the canal across New Jersey and the Chesapeake and Ohio and all the waterways is that the companies operating on them shall pick up and deliver at every important terminal point by lines which shall radiate out by motor truck from 50 to 100 miles and they shall take from these places goods thus brought to their station. So that when, for example, they were delivering goods from Kentucky to Illinois, it might start from a farm or from an inland village by motor truck and go to the nearest waterway station, there to be picked up by vessel and be carried down the Kentucky and Ohio to a point sufficiently near in Illinois to where it was to go, there to be picked up by motor trucks which would carry it to its destination.

And it should be billed through by one bill of lading. That would definitely establish that the vehicles and highways are not accidental or incidental but an essential factor.

That, it seems to me is what we are coming to before very long. I imagine we will come to it almost before we think of it.

From that are a number of inferences. The public authorities have got to be sufficiently

as today. The vessel with the largest passenger capacity, or at least second largest, (6,000 persons) is in operation on that river. The freight carried on the river amounts to over eight million tons a year by water.

I put a factory at Troy because I could get by water, express service at freight rates loading machines on the boat in the evening and have them delivered in New York the next morning, while to ship the same material by railroad to New York would require three to five days by freight.

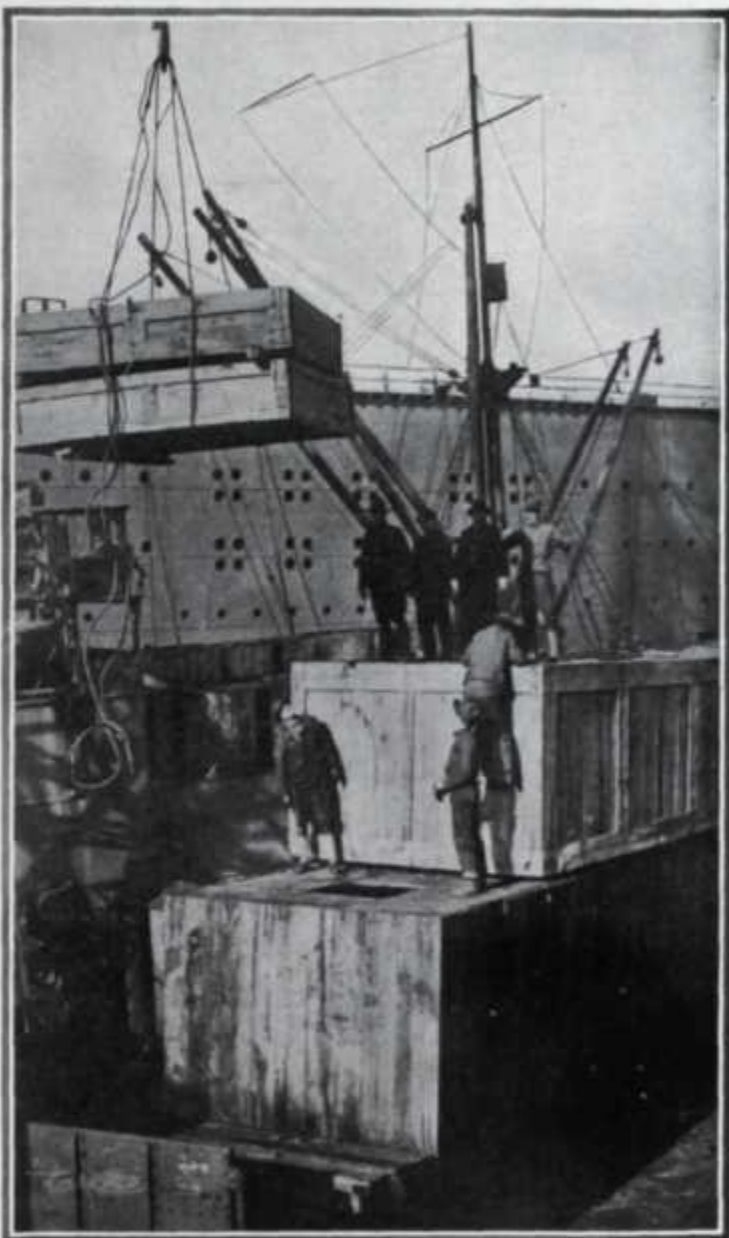
Directly back from the river bank on either side are two of our fine highways. Neither the railroad nor the river meet all the needs of the people living on those roads. You might build the railroads up until they are ten tracks wide, but you do not fully help the farmer ten miles away to get his produce to market. And you might fill the river with steamers, and he may be still isolated. There must come something to his farm which transports his produce easily and systematically and in harmony with other methods in duplex action going and coming. So our friend the farmer must have the Rural Express or its equivalent which comes to his door, which in the morning connects him up with all the round earth and brings him what he wants of the earth's products back to his door that night.

Modernizing the Pribiloffs

I CANNOT think of that except as a matter of common sense. It is a thing which has got to be, and in a very few years, at least, will be as accepted as such things as the rising of the sun and the setting of the sun. It will be considered normal. You will even find, if you have not already found, farms offered for sale on the basis of having a Rural Express coming and going on one side of it, perhaps on two sides of it as we get into it more thoroughly. The whole rural postal delivery system was the promise and pledge of the Rural Express. What we do when we send the motor truck through the rural centers is to push the rural free delivery and the parcel post service just one step forward.

I have had motor trucks put on the Pribiloff Islands in the Behring Sea. They are building the roads to run on before they can run on them. And there, 250 miles north of the Aleutian Islands, we can make motor trucks pay for themselves in a single year, by the force they add in effective transportation.

So many are familiar with the automobile, not as familiar I believe as they are going to be, that it seems hard to think it can work as revolutionary a change in their life as it is going to do. But I am perfectly certain that there abide these three elements of transportation, railway, waterway, and highway, that they are one, and that none of them will reach its full value to the community without the other and that each is the friend of the other.



(c) Committee on Public Information

The ship and the railroad make a fine working pair in the great war, and where the railroad may not venture the motor transport comes to its aid. At this French port, cases of locomotive parts are being unloaded from the ship and placed upon the flat cars in one operation.

educated to make a good thing possible. They have got to learn, as many a farmer has to learn, that the most costly thing in the world is a bad road, that as compared with sealskin furs and platinum, mud is far more costly an item, and that there is no such evidence of a muddy state of mind in a community as a muddy state of highways in the community. They go together—mental and physical mud.

When the Railroad Can't Help

NOW let us see whether our idea is false or true in its application. The Hudson River has by it six tracks of railroad. The fleet of vessels upon the Hudson River was never as great, never so new, or well equipped

New York to Bagdad via the Air Line

Unhampered by ice, forests, swamps, or seas—the airplane will be our long distance carrier, bearing mail, freight and passengers to the antipodes

By ROBERT EVERETT

THERE is really less than a handful of means by which man ever has traveled. A floating log with a chip carried on it—the dreadnaught, turbine liner, canoe and submarine all have come by gradual development from that one object—carrying—another seen by prehistoric man. A storm on a hill-top, a tree crashed over to roll lurchingly down hill—*cistum*, hackney, prairie schooner, limousine, all have descended from the observant idea born in some half-monkey man as he watched this very phenomenon of motion.

Until the airplane's arrival, travel might be said to have been accomplished altogether by the use of the boat and the wheel, or by animals or sledge. The Pyramids were built with sledges; travel today in the Madeira Islands is by the same means. Even as long ago as the day of the first savage who went beyond his fellows far enough to sit astride of a log and paddle with his feet, it may have occurred to the mind of man that the bird is the best traveler and wings (given the power to fashion and use them) the most efficient means of motion.

But for centuries travel through the air became more than a visioned culmination of the efforts of man to utilize the elements and to

and naval, has made history, in every sense—in the sense of individual contact and impression, in the social and commercial sense, the national and military sense and in a cultural sense, as well (a chariot took Elijah from the earth, and litter and stage coach move through many ballads)—its use already is making similar history and eventually will revolutionize many conditions of intercourse.

The Century of Motors

IN principle it embodies many novelties in mechanical travel, and its interest is not confined to that alone. Probably it will never lose its thrill of altitudes and power. In many respects it is at once the most beautiful, inspirational, and serviceable of man's inventions. It is wholly a modern man's vehicle. It is impossible readily to imagine a man of any century earlier than the last half of the nineteenth as a pilot. The airplane is *mechanism*; a pilot has oil splashed on his goggles and sits behind, before or between the barking roar of engine cylinders. The initial leaping roar of a high-powered airplane engine in the field is terrific. Cambyzes, who had 20,000 chariots of war, or Robert Fulton, who built the first steam boat, would run, at first, from it; they could not help it. A propeller blade, in length some twenty feet, is whirled around until it cannot be seen; it would tear a man in two; propeller suction forcibly will whip the clothing from a person directly in its

line. All these things make the airplane essentially the vehicle of the man bred in the century of motors, dynamos and force mechanically enchained.

To know the airplane it is necessary first to realize its achieved powers and its future. The beauty, in its structural lines and in the lure of height, supremacy and speed it engenders is something inherent to flight. It is not natural to think of an ugly or graceless vehicle as the one to subdue the air. Its power is that it is the swiftest vehicle and the one medium of which is the air. It travels without obstruction and affords an observation of land otherwise impossible. It needs no track or road. It will some day be independent of weather and already is somewhat independent of darkness. It is inherently safe. Its peculiar limitations fall far short of its exceptional advantages, and these advantages have not been fully felt because the time since the first airplane flew is short.

The commoner airplane of the future quite probably will not fly faster than the swift machines of today. Their speed is 150 miles an hour or better, outriding any storm or express.

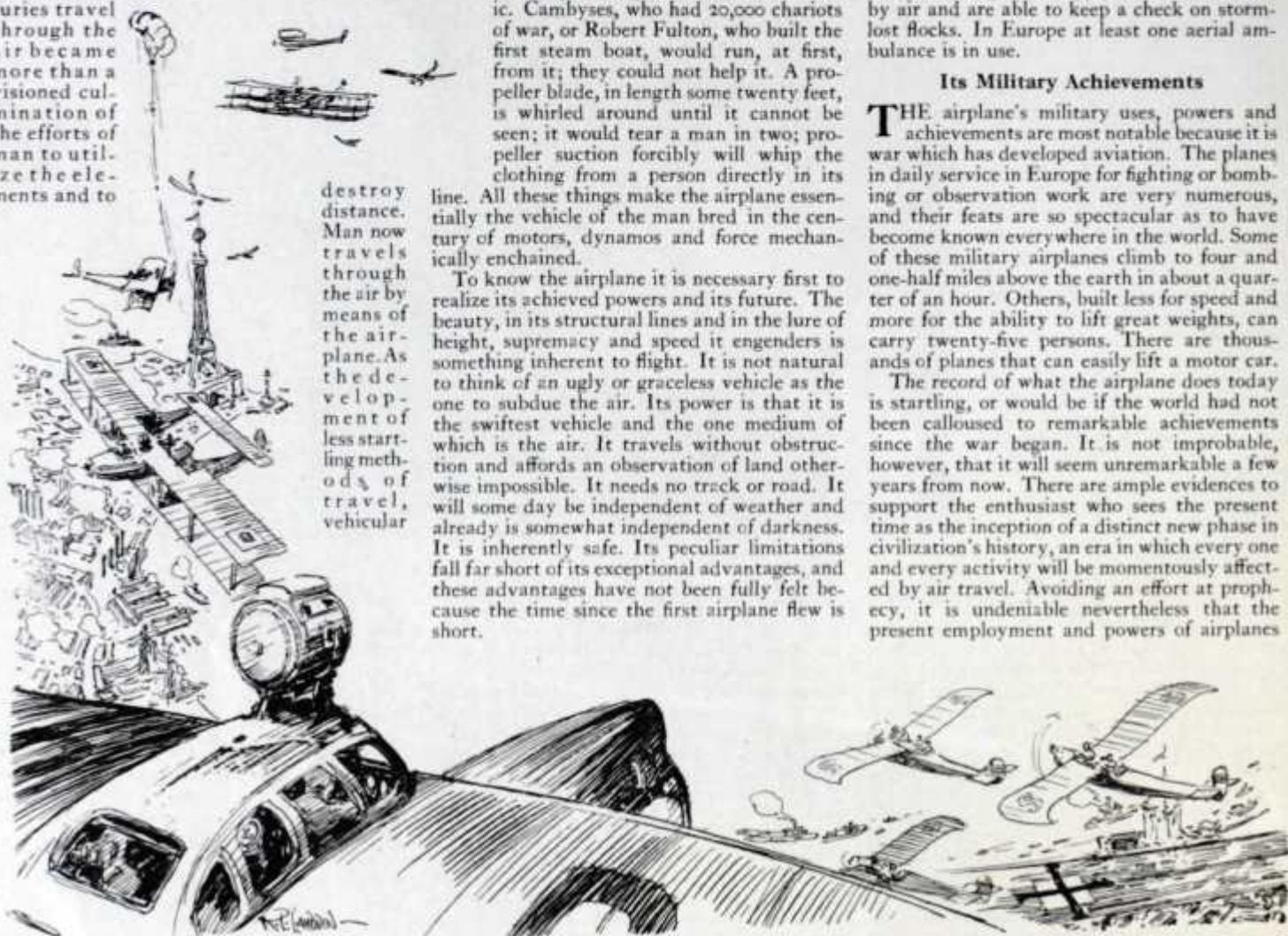
The airplane is only fifteen years old. Yet already the Alps, the Mediterranean, the English Channel and the Caucasus have been flown across, and long distance flights such as from Turin to London and from London to Constantinople, the former made without a stop, (a distance of 656 miles in six and one-half hours) are not uncommon. Airplanes are used already for fighting fire and for carrying commercial travelers' samples. Mails are carried extensively by airplanes, also. In Italy a series of aerial mail landings is established and deliveries are made daily and with as great regularity as by train. Corsican-French and Sicilian-Italian aerial posts are in service and it has been reported that an aerial mail route from Hamburg to Constantinople is laid out, and may even be in operation. Airplanes are employed, also, although in small numbers, for fire patrol work above forest areas, and by sheep farmers, who supply scattered herders by air and are able to keep a check on storm-lost flocks. In Europe at least one aerial ambulance is in use.

Its Military Achievements

THE airplane's military uses, powers and achievements are most notable because it is war which has developed aviation. The planes in daily service in Europe for fighting or bombing or observation work are very numerous, and their feats are so spectacular as to have become known everywhere in the world. Some of these military airplanes climb to four and one-half miles above the earth in about a quarter of an hour. Others, built less for speed and more for the ability to lift great weights, can carry twenty-five persons. There are thousands of planes that can easily lift a motor car.

The record of what the airplane does today is startling, or would be if the world had not been calloused to remarkable achievements since the war began. It is not improbable, however, that it will seem unremarkable a few years from now. There are ample evidences to support the enthusiast who sees the present time as the inception of a distinct new phase in civilization's history, an era in which every one and every activity will be momentarily affected by air travel. Avoiding an effort at prophecy, it is undeniable nevertheless that the present employment and powers of airplanes

destroy distance. Man now travels through the air by means of the airplane. As the development of less startling methods of travel, vehicular





point the way to their manifold further use in both peace and war, and that well-founded plans for aerial passenger services, mail services, commercial air routes and aerial patrols are in formulation.

Among these plans is that for an aerial mail and fast passenger service between Paris and London, to be extended to other European cities and perhaps eventually to other continents. English business men of importance have discussed this plan and cost and rate tables have been published which establish an operating cost of scarcely more than a dollar a mile for an airplane appointed to convey from a dozen to twenty-five persons across the Channel, from the one capital to the other, in three and a-half hours. It is quite likely that this service will be established once peace returns.

What Is Its Commercial Future?

As an earnest of the immediate future of airplanes, every great government is endeavoring to ensure for itself the completest advantages that can come from the number of serviceable airplanes, and the great facilities for their further production, that will obtain when peace limits their employment for military uses. A committee of the United States Government has recommendations in hand based on investigations into possible profitable commercial employment of all classes of planes, and a British Civil Aerial Transport Committee antedated it by several months.

The important members of these committees foresee the principal immediate post bellum uses of the airplane as carrying mail, transporting passengers and valuable light freight, maintaining coastal patrols and carrying out scientific surveys and explorations. The Congress of the United States, as a matter of fact, already has provided an initial appropriation for the establishment of aerial postal routes and the creation of a personnel.

Bavaria, it has been reported from Germany, has aerial mail routes laid out on paper for all of Central Germany, waiting only for the war's end to be made actual. The value of aerial mails is seen in their bringing into close communication separated insular or otherwise remote possessions, and in England particularly it is being planned to institute mail service, joining by air all the distant dominions and holdings of the British Empire.

While, therefore, the carrying of passengers by air already is not uncommon, usually these passengers are on special missions of some description. Commercial passenger transport by air is known to some extent, especially in Germany, before the war, with dirigibles. That heavier than air machines are flying today, however, capable of carrying twenty-five persons, is promise enough, of course, that such transport will be developed. Its development will come with a better knowledge of wind currents and with the establishment of landing grounds at frequent intervals along regular routes. It is interesting, however, to know that the members of governmental committees, who are prepar-

and a-half days, Vancouver three days.

No one concerned with aviation questions the inevitability of Transatlantic flight within a very few years. Only the entry of the United States into the war prevented a trial flight in 1917 under the auspices of a great American newspaper, the route to have been from Newfoundland to the Irish Coast. There are unquestionably large planes in existence today which can carry enough fuel to drive them across the Atlantic if winds are not strongly adverse.

The carrying of freights by air is little done today, except such freights as

bombs and propaganda leaflets. Freight carrying by airplane is certain to no less

a degree, however, than the transport of passengers. Some warrant of this is apparent in plans drawn up for aerial harbors and freight terminals.

Extensive blue print plans for one such enterprise are prepared, the site being a certain beach beyond the immediate congested centre of New York. A

very comprehensive air freight and air-passenger receiving station also is designed for the port of Rome. Air-carried freight will be of two sorts. It is believed, first, light, valuable freight or freight of quick perishability, which may be carried above established land or water routes; and, second, freights

of varying classes to be transported from remote points not now easily accessible by other means of transportation. The carrying of securities and even of bullion from one hemisphere to the other or from country to country is a suggested example of the first one that might have important effects in the adjustment of international balances. Many classes of express freight carried before the war by swift ocean liners may also come into this classification and innumerable domestic deliveries of valuable or perishable goods is contemplated as soon as planes can be obtained. Of the second class of freight transport by air the carrying of tropical products from regions remote by

ing for the airplane's commercial future, reckon that by air route New York will be just under two

days from London or three and a-half days from Bagdad; that Marseilles will be only eight hours. Constantinople and Petrograd will be only twenty hours from London; Ceylon will be two and three-quarter days, Tokio four and one-half days, Sydney five days, Cape Town three

(Continued on page 36)



AN ECONOMIC GENERALISSIMO

POOING of Allied resources is a program toward which much has been quietly accomplished, as recently became clear through statements made in England. Speaking in September, a member of the British Cabinet referred to the importance of supreme direction of all economic effort on the part of the countries which are hostile to the Central Powers. Supreme direction of this kind implies examination of Allied wants and of Allied sources of supply, and their complete co-ordination with the capacity of Allied shipping. Very obviously, this is a program to awaken a man's imagination. When it is achieved, we shall have an economic generalissimo to compare with the generalissimo who directs the united military strength of the Allies.

Several international bodies have already been set up. Each is composed of delegates from the different countries concerned, including the United States. A discussion of the importance of pooling of Allied resources occurred early in September at a meeting of the Allied Maritime Transport Council; its duties are apparent from its title. A body with a large task is the Inter-Ally Council on War Purchases and Finance. Other important international bodies are a Food Council and a Munitions Council.

The possibilities of these bodies are illustrated by the Transport Council. When ocean tonnage was needed to carry increased numbers of American troops across the Atlantic, France through her delegates on the council contributed steamers which had been assigned to France for her necessary imports. If a series of disasters, such as the explosion which recently occurred in New Jersey, should deprive our armies of shells, the Munitions Council would undoubtedly see that shells were forthcoming from Allied countries. "*E pluribus unum*" is an old principle with us.

MUNICIPAL IMPROVEMENT NOTE

PONTIUS PILATE, like many others whose names are written in history, never lived to see some of his projects carried to conclusion. Although one of his dreams was a water system for Jerusalem, the ancient city today has running water for the first time. Six weeks after the British captured the city, they had repaired and completed the reservoirs and the 15 miles of old aqueducts that Pilate had begun, but never finished because the home government at Rome grew suspicious of the sums Gov. Pilate was spending and recalled him before the water was started. The British Army engineers finished the job nearly 2,000 years after, and Jerusalem is getting its water from the same springs and in the same way that the specifications called for by old Pilate's engineers.

ONE OF GERMANY'S PROBLEMS IS HOUSING

A ROOF is one of the necessities of the twentieth century, as belligerent countries are coming to realize in good earnest. England now finds that it is in need of no less than 250,000 houses.

Germany is in a worse case, with regard to shelter. The increase in German population requires 200,000 new houses annually, and 75% of them in small sizes. When war ceases Germany will need more. In Berlin alone 20,000 soldiers' wives today have no homes, and 20,000 more women will look for habitations of their own upon marrying soldiers when the armies are demobilized. Cologne has created a municipal housing bureau.

In Magdeburg, schools have been turned into dwellings. This year Prussia has passed new legislation to permit towns to condemn lands for housing projects. The central German Government has this summer taken a census of all houses, and been so disturbed over the results that it contemplates creating a fund of \$125,000,000 with which to promote erection of dwellings.

Clearly, back-to-the-home is going to be as great a movement in Germany, and entail as great difficulties, as back-to-the-land ever was anywhere.

ENTER THE TRADE COMMISSIONER

A TRADE COMMISSIONER is being sent by Australia to the United States. He is to have headquarters in Washington. For this post, the head of one of Australia's largest commercial organizations has been chosen.

A trade commissioner differs from a commercial attaché mainly in being more "foot-loose"; he is not nominally or otherwise on the staff of an embassy or a legation. Trade commissioners are apparently going to increase in numbers and in importance. England is establishing new trade commissioners in her overseas possessions. The dominions of England have these representatives not only in the mother country, but in other dominions and in foreign lands. Thus, Canada has trade commissioners in Argentina, China, Cuba, France, Holland, Italy, Japan, and Siberia, as well as in different parts of the British Empire.

TRAIN-LOAD LOTS THE FASHION

AIRPLANES by train-load lots is the record of current shipment for American factories announced by the Aircraft Production Board on October 2. We hope it may soon be a train-load every two minutes!

Train-loads are becoming an established unit for other commodities than circuses and western fruit. Provisions for our forces overseas now move from the middle west in train loads, and even perishable freight for our own consumption is traveling more largely than ever by solid trains. This is a modern variety of caravan, which, with a link of merchant steamers in fleets, we like to see leading up to your lines on the western front.

PACKING REFORM BEGINS AT HOME

PACKING used to be a matter of difficulty in our export trade, when shippers failed to consider the vicissitudes their packages might undergo on porters' shoulders and on mule-back in remote parts of the world.

It has now become important in our domestic business, as well for the Railroad Administration has set out to eliminate unnecessary losses because of insufficient packing. In four months this summer, the Railroad Administration announces, 27,000 small shipments were rejected by receiving clerks at freight stations in the Middle West, because the packages were in unsuitable condition for transportation to destinations even within the United States.

BLACK-LISTING BLACK LISTS

THE BLACK LIST is not popular with the people it reaches. During the summer, circulars were distributed in Chile, calling a meeting to form a "league to put down black lists." This particular attempt at international insurrection does not appear as yet to have got very far.



MOTES AND BEAMS AND WEBB LAWS

COOPERATION in American export trade still worries some of our good friends overseas. The *London Statist*, beautifully unconscious of what goes on under British laws, shakes a warning finger at us in one issue and the next week comes out with a great scheme by which British interests which control three-fourths of the world's rubber production, of which United States manufacturers purchase 70%, would deal as a unit with us.

One is tempted to quote a little Scripture for the benefit of our esteemed contemporary overseas.

NAILING THE BUSINESS LIE

FALSE PRETENSES in advertising, brands, and similar forms is getting short shrift from the Federal Trade Commission, which continues strong in its exercise of power to order stopped any unfair methods of competition. A wholesale grocer can not slyly intimate on his labels that his blend of South American coffees originated in Arabia and the East Indies. A concern that undertakes to sell vegetable oils has been called upon to explain how it comes to embellish its letterhead with handsome pictures of extensive manufacturing buildings, whereas it owns no such plants. One manufacturer is to tell the Commission how it came that his product was "certified" by a Government bureau which had given it a test.

In this field of endeavor the Commission is likely to become a great protector of standards of veracity against violation by individuals.

JAPAN ADDS IRONY TO DEFEAT

GERMAN "EFFICIENCY" may have to give way to the Japanese variety. According to the Japanese, when they chased the Germans out of Tsingtao on the coast of one of China's richest provinces, the Germans in seventeen years had in their handsome city established only a brewery and two flour mills.

Official Japan set out to make a better record. It offered leases of industrial sites at low rates, at the same time exempting factories from all taxes; it offered electric power at specially discounted rates; and it also instructed the railway which fetches supplies from the interior to cut its freight charges.

The results in three years have made the officials proud of their achievements. The new factories which their encouragement has brought to Tsingtao produce cotton yarns, beer, salt, albumen, brick, canned goods, silk, ice, soap, leather goods, bone meal machinery, oils and fats, matches and some other things not itemized.

SAVING AT THE SPIGOT AND THE BUNG

ACTUAL SAVING effected through the curtailments arranged by the War Industries Board is sometimes hard to figure with the accuracy necessary to satisfy inquirers' curiosity. The Board occasionally gives it no estimates, however, and so makes possible some fairly definite forecasts.

From agricultural implements and farm machinery it is planned to keep 500,000 tons of steel during the next year. Automobiles may spare an equal amount in the current six months. In October, November, and December 150,000 tons are to be saved

from tin-plate. Substitution of vitrified clay and cement pipe in the Government's new buildings may release cast iron equivalent to 80,000 tons of steel. The steel released will go into many war uses, including rails and equipment for the lines of railroad which have to be built to keep pace with our advancing troops. An impression is being fixed at Washington that our forces alternately smash the German line and call for more steel. Obviously, it will take a deal of railroad building to place a gridiron of rails over the whole of the territory to the Rhine, and beyond.

Altogether, twenty-seven industries have taken up programs of curtailment to save steel and other materials. The articles affected are decidedly numerous. Shirt boards for laundries are conserved. Chafing dishes are to come in but one size. Cooking stoves are to go without nickle-plated embellishments. The bedroom slipper has been taken firmly in hand. Spools for thread are to be compelled to yield the space in 600 railroad cars a year. Even straw hats, together with their heretofore riotous hat bands are made subject to restrictions other than the fancies of style.

AS OUR SHIPS GO DOWN TO THE SEA

NEW SHIPS to the extent of 360,000 tons deadweight took to the water from American shipyards in August, and we have not yet reached "quantity production." During the same month British yards put overboard 124,000 tons. In other words, the yards of the United Kingdom and of the United States were producing at a rate of 4,500,000 deadweight tons a year.

In the midst of our efforts we have been too busy to notice several really significant events. In May, vessel construction, in Allied and neutral yards, for the first time since 1915 exceeded losses. In August, construction in American yards surpassed all other Allied and neutral construction combined.

The fact is the United States has returned to the sea in such good earnest that the Department of Justice has had to bestir itself and create a special organization to represent the Government's interests in the admiralty courts.

COTTON SHIES AT REGULATION

COTTON had a decided flurry in September, when two committees were appointed by the War Industries Board, with the President's approval. The Cotton Committee is to look into the whole matter of production and distribution and the Committee on Cotton Distribution is to seek especially proper utilization of surplus cotton in grades below "middling," and to make purchases for the Government and the Allies at market prices and through usual channels unless and until the Cotton Committee declares a necessity for a change.

Announcement of the appointment of this Committee caused disturbance in southern markets and temporarily brought distribution very largely to a standstill. When rumors about opinion in regard to prices held in Government circles had been denied, and the Cotton Committee insisted it had no present intention to recommend a fixed price, conditions tended to improve.

Proposed Legislation Affecting Business

WHEN revenue bills carry billions in taxes they apparently go slow by reason of their weight. Last year the bill which had its appearance on May 9, did not become law until October 3. This year, it was decided at the last of May there should be a bill, the Committee on Ways and Means took 2,200 pages of testimony and placed a bill before the House on September 3, and since September 21 the measure has been before the Senate Committee on Finance, where it will apparently remain well toward the end of October. Unless events begin to happen with more rapidity the law will bear a December date, at the earliest.

Of course, the Committee on Finance will have some changes to recommend to the Senate. How extensive and how fundamental they will be remains to be seen. It is pretty sure to remove such provisions as the income tax on bonds issued by states and municipalities. In the definition of invested capital, which has importance in connection with the excess-profits and war-profits taxes, it may take tangible property at its value on March 1, 1913, instead of at the time it was exchanged for stock, and the committee may remove the limitation which does not allow the value to be larger than the par value of the stock issued.

At the same time, it may look for some new sources of revenue. In the original plan of \$8,000,000,000 there are now several deficiencies, the latest of which arises through the new exemptions from taxation of United States bonds, provided on September 24. These exemptions have been estimated as diminishing the results of the income taxes by \$100,000,000 or more a year.

Bond Law of September 24th

ON September 12, bill for the exemptions was brought forward, and quickly enacted into law within the next week and a-half. Its chief purpose was to increase the solubility of the Fourth Liberty Loan. The new feature was an increase in the amount of United States bonds exempt from federal surtaxes on income—the only income tax to which these bonds are subject.

Already, the interest on a holding of \$5,000 in bonds otherwise taxable was exempt, without limitation as to time. In addition, the interest on a holding up to \$30,000 in bonds of the Fourth Liberty Loan was made free of federal surtaxes on incomes and profit taxes for the period of the war and two years after its close, and for a similar time interest was exempted on Second Liberty bonds and on First Liberty bonds converted up to an aggregate holding of \$45,000 in these two issues, with a limitation that the amount of these loans involved could not exceed one and one-half times the holder's subscription to the Fourth Liberty loan and still to have them at the date when he claims the exemption. Interest on the First Liberty loan unconverted, not being taxable at all, was unaffected.

The total result of the legislation is that an individual may hold free of federal taxes for a period of two years beyond the war, not only any amount of First Liberty bonds at 3½%, but also \$50,000 in First converted at 4% or 4¼% and Second Liberty bonds, and the \$30,000 in Fourth Liberty bonds.

☛ Senate Committee makes changes in House Revenue Bill

☛ Liberty Bond exemptions decrease taxes on big business

☛ Plan for Reconstruction Commission laid before Congress

☛ New appropriations increase budget to Thirty Billions

☛ Contest renewed over proposal for water power legislation

Because of the graduation in surtaxes on income, the new exemptions will be progressively valuable as a subscriber's income increases. With computations made according to the rates in the new revenue bill, the income value of \$30,000 in Fourth Liberty bonds to a person holding \$50,000 of the earlier issues is equivalent to the income from taxable bonds which yield:

5.09%	if total taxable income is	\$7,500
6.27%	" " " " "	20,000
8.13%	" " " " "	40,000
18.28%	" " " " "	100,000
26.49%	" " " " "	1,000,000

In another way, the law of September 24 made special provision for the new Liberty loan. It authorized national banks to lend to a single borrower an amount in excess of 10% of its capital and surplus, provided the excess is secured by like face value of Liberty bonds or certificates of indebtedness. October 9 the Comptroller of the Currency issued his regulations on this subject. Under the regulations, a national bank may until July 1, 1919, lend to a single borrower:

(1) not to exceed 10% of capital and surplus as formerly permitted.

(2) not to exceed 10% further if secured by Liberty bonds or certificates of indebtedness, and,

(3) a further unlimited amount secured by \$105 in face value of Liberty bonds or certificates for each \$100.

Reconstruction

BILLS which contemplate official study of problems of reconstruction began to appear about the first of October. Minority members of the House and Senate brought forward a proposition for a joint congressional committee on reconstruction, to study and report upon problems affecting:

Labor,
Capital and Credit,
Public Utilities,
Demobilization of Industrial and Military War Resources,
Foreign Trade,
Continuance of Existing Industries and Establishment of New Ones,
Agriculture,
Production and Distribution of Coal, Gasoline, and Other Fuels,
Shipping, Shipbuilding, etc.
Housing,
War Legislation as Applied to Succeeding Period.

The Administration's plan was introduced on October 3. It provides for a Federal Commission on Reconstruction, of five members appointed by the President and confirmed by the Senate. In other words, this plan would substitute an independent commission for the congressional committee of the other proposal. Such a commission would be in the same position as the Tariff Commission.

The new commission would have functions of investigation, with power only to report to Congress, upon problems arising out of the war and out of the "transition of the economic, industrial and social life" of the country from a state of war to a state of peace. In particular it

would be directed to give its attention to:

Merchant Marine—its financing, regulation, control, and development;
Foreign Trade—its development, financing, expansion, and direction;
Reconversion of War Industries to Normal Production—their reorganization, financing, and readjustment;
Technical Education and Industrial Research, as a means of developing and strengthening industry;
Labor—its redistribution and employment in agriculture and industry after demobilization;
Raw Materials and Foodstuffs—their supply, distribution, and availability;
National Resources—their conservation and development;
Inland Transportation—by rail and water;
Communication—by telephone, telegraph, and wireless;
Reorganization of Government Departments;
Consolidation of Acts of Congress by Subjects.

Such a plan lays out a very considerable task for a hardworking and able commission. Besides, before the proposal becomes law, it may take on several other important items.

Reconstruction Studies Abroad

CONCRETENESS does not yet characterize the bill for a reconstruction commission, to the extent which has been reached abroad. In England there has been an attempt to study, not so much the broad question of foreign trade, but rather the place in exports, and the prospects, of the coal trade, the iron and steel trades, the manufacture of electrical supplies, shipbuilding and marine engineering, etc. We still are, as it were, in the first stage of our ideas about reconstruction; in England, where the evolution of events in August, 1917 produced a Ministry of Reconstruction as successor to the earlier Reconstruction Committee of the Cabinet, it has been found that the subject passed through more than one phase in the public mind.

The British Ministry of Reconstruction has just described itself, in a two-penny pamphlet. It faces problems of demobilization of between six and seven million Englishmen. Its functions, like the duties of the committees and commissions proposed here, are to devise plans; no responsibility for their execution falls on its shoulders. English-fashion, it has attacked first the hardest problem—the tonnage of shipping that will be available for England and the way in which it should be apportioned for different uses. Regarding raw materials, of which the Ministry is firmly convinced there will be a real shortage after the war closes, it is very earnestly trying to make comprehensive plans.

Germany, of course, has long been busy trying to perceive the future and is making characteristic plans to meet it. Its agency for study of reconstruction—the Department of Economics—has now declared for governmental control in the transition period over many industries and over the means of distribution.

(Continued on page 26)

Patriotic Prescriptions

For instance, German *Atophan*, Americanized in name and manufacture, cures the Gout as well as ever and incidentally gives the Kaiser's drug trade a sickening jolt.

By JOHN FOOTE, M. D.

Author of "The Geography of Medicines," etc.

THAT most wise of philosophers and famous of Jewish physicians of ancient times, Maimonides, was asked by his royal patron, Saladin, to settle a dispute as to which was the most important and most desirable merchandise—food or clothing.

"Neither, great Sultan," said Maimonides. "Medicine is much more important than either. The sick need little food and the fevered discard their clothing. But for a remedy to heal them, they offer all their wealth. For medicine to them is life itself under another name—and nothing is more precious than life!"

The ancient oriental peoples set more store by drugs than we do nowadays. Every returning caravan carried bales of drugs and medicines. The sick were brought to the roadside along caravan routes in the hope that some one returning with a new remedy might be induced to render aid—to be a *therapeutist*. That is where our modern word to describe the science of using medicines to relieve disease originated—the word *therapeutics*.

A mysterious lure dwells in the word medicine; *pharmacy* itself comes from a Greek origin which means magic as well as drugs.

Medicine in Commerce

FEW realize the great part which medicines play in the world's commerce. Long, bloody wars have been fought for drug supplies; great geographical discoveries have resulted from the search for drugs and spices. The opulence of Venice in her golden days was a result of her monopoly of the drug and spice trade of the East. Columbus' maiden voyage was a search for a near way to the drug and spice markets of the Indies. And when the great freight submarine, the *Deutschland*, landed in Baltimore after running the gauntlet of the British patrol, its chief cargo was German medicinal chemicals.

Our great country, in her prodigality of wealth, did not in the past find it worth while to manufacture a large number of chemical substances which could be bought cheaply from other countries, particularly Germany. There were many patented processes for the manufacture of chemical remedies, especially those made from coal-tar, which American manufacturers could not use, even if they wished to.

Such was the situation when we declared war on Germany. Then two things occurred—first, the Federal Trade Commission announced that it was prepared to issue licenses to American firms for the manufacture of many German chemical products such as "606," Veronal, Atophan, etc., under their chemical,

rather than their trade names; and, second, the Alien Property Custodian took over in the name of the United States all chemical companies known to be owned and controlled by German interests.

Of course, Aspirin had for a long time been made as acetyl salicylic acid. But Atophan, a well-known specific for gout, could not be procured in this country, though it is now being made here; and Veronal, so valuable in insomnia; is to be made under the name of "barbiturin."

Phenylcinchonic acid is the new name for Atophan—just to show the Germans that they cannot beat us even at long names when we really try.

Now, of course, it will not be worth while making these things if no market is found for them. That is where the physician comes in. He must be the "introducer," the traveling salesman for these new-named chemicals if they are to be used in medicines.

For, though patented, they are not "patent medicines." Excepting Aspirin, they are not largely known to or advertised to the general public. This regulation is imposed by a sort of medical board of censors on all medicines intended to be used in physician's prescriptions. Once this is realized, it will be understood very readily how important a part the physician must play in energizing this new American industry.

Fortunately for the country and its manufacturers, few bodies of professional men are so well organized as the physicians. The American Medical Association numbers among its members practically all the practicing regular physicians in the United States. This organization co-ordinates many hundreds of subordinate local organizations; it publishes the splendid weekly, *The Journal of the American Medical Association*, and it has as a most important part of its work a Council on Pharmacy, made up of men whose scientific attainments are of international reputation.

Very early in the course of our war with Germany, the American Medical Association set to work to study the problem of drug supply and the encouragement of native manufactures to take the place of German products. Determined to keep up to high chemical standards in the quality of the new products, the Council of Pharmacy worked unceasingly analyzing and reporting on various products offered to them as a result of the growth of the infant industry. But not only in the scientific laboratories of the Association was this work carried on; in the published deliberations of the House of Delegates at the 1918 meeting in Chicago, we see resolutions offered, urging American physicians to use no

drugs of German manufacture unless absolutely necessary. This shows that the rank and file of the organizations are also alert.

Moreover, in the Scientific Exhibition at this Chicago meeting, a large assortment of potassium salts was exhibited side by side with the corresponding sodium salt, the price of each being shown. It was demonstrated that a saving averaging a dollar a pound on each of these products could be made by using sodium instead of potassium salts. The use of potassium in medicine of course, was taught by Germany, because Germany had almost a monopoly on the supply of potassium. The five thousand delegates from all over the United States could not help being impressed with this sermon in salt. Upon returning they will not only use sodium bromide instead of potassium bromide—helping their patients physically and financially thereby—but will also spread the doctrine among their fellow-practitioners. Thus can America be saved millions of dollars a year!

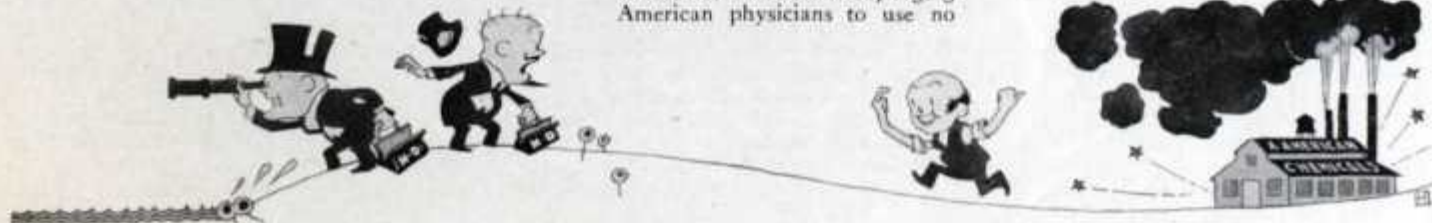
A profession that sent almost one-third of its total active membership to the army, that has stimulated mature men with large lucrative practices to such a patriotic pitch that they have given up their life work and its emoluments to accept a lieutenant's commission at the front—a profession made up of men of this type may well be counted on to encourage and support any work before, during or after the war, which will prevail against the enemy.

Now is the Time to Advertise

AND so, it may well be that this great body of one hundred thousand thoughtful men for many years to come will scrutinize preparations they prescribe for the "made in Germany" taint, or better still, confine their prescribing as much as possible to chemicals made in America.

And now is the time for the American manufacturer to intensify his advertising propaganda. The American physician is willing; he is interested in public, civic and national welfare movements; and he has done his share nobly in war work so far. But he is very, very busy nowadays, and it would be well for the American manufacturer not to let him forget that certain chemicals formerly made in Germany are now made here—and that they may be prescribed freely under their new names. Not only advertising in scientific journals, but detail work to interest each individual physician should be done. No similar expenditure in legitimate advertising will bring such results to the advertiser and to the national welfare.

"Patriotic prescriptions" may today well become a slogan of the medical profession.





Those Letters You Sign

By JOHN COTTON DANA

Librarian, Free Public Library, Newark, New Jersey

THE letters that leave your office every day, your silent salesmen, are always at work for you. Every piece of typewriting that goes out signed by you is making friends, customers and sales for your company. Much selling value, too, lies in letters which are not selling letters at all. And even the unimportant notes written by your stenographer often bring orders through their skillful use of apt words and phrases. The spirit in which your executives have answered the letters that come to their several desks has made friends for your company. The clear, simple, slightly humorous and intensely human way in which all possible friends and customers—and this means all correspondents—are approached on paper, has built up that good impression of your firm which underlies its success.

Every Letter Should Sell

BRIEFLY put—every item of your correspondence is an advertising item. The selling value of the "typewritten word" is a very real thing and every letter signed with your firm's name contains some of the factors that stimulate desire for your product in the mind of the man to whom it is addressed.

Even the correspondence you call "routine" is always selling your products. You carefully and almost prayerfully construct your "sales letter," but it is the ever-present friendly and genial note, found in all your out-going mail that has made for the sales-letters a word of welcome everywhere.

All these things are true of your firm, of course! Of other firms they are equally true. The experiences of other firms in this field of letters can supplement yours to your profit.

The correspondence men of many large firms met last October in a "Better Business Letters Conference." Their proceedings tell what the other man is doing. Titles of a few typical papers read and discussed are "Sales attitude, its place in every letter," "Training letter writers," "Getting better letters." Here is practical help to your correspondence department. Copies of the proceedings containing these papers are for sale at \$1.00 by Mr. H. N. Rasely, Norton Company, Worcester, Mass., the secretary of the convention. Some firms print "Correspondent's manuals" which make good reading for your executives and their staffs. The titles of some of the pamphlets published by the B. F. Goodrich Rubber Co., Akron, Ohio, show the kinds of advice that help the men who are writing the Goodrich letters: "Form letters that sell," "Good paragraphing makes letters forceful," "Clearness in a business letter."

Supplementing these things that grow out of every-day office problems are books. Some of

these are books for beginners; others are of direct, practical value.

Of books planned to "do the dictating for you," there are many. The time these will save for you is in direct proportion to the kindness of your customers in asking just the questions to which these books give proper answers! But, they do give a clue to the kinds of letters other firms are using. The day of the "form" paragraph would seem to be here. And, to meet war conditions in the correspondence department, some degree of more or less automatic dictation has become almost a necessity.

"Letters That Make Good," by G. W. Poole and J. J. Buzzell, 1915 (American Book Co., Boston. \$5.) consists of reproductions, showing the actual make-up of letters that have "made good"; the letterhead, size and color of type, spacing, etc. These follow a series of articles on the principles of letter writing by several authorities.

Automatic Letter Writer, 1914. (Shaw \$4.) Gives many form paragraphs.

Making Letters Pay System, by E. H. Schulze (E. H. Schulze, N. Y. \$25 per annum) is a loose leaf system of form letters and paragraphs; with supplementary information, valuable for the mailing department, and a service giving criticism, advice, etc., on letters you may care to submit.

Books that show you how to do the dictating yourself are few and are often not of much practical value. To get the most out of the best of them, repeated experiences with the principles suggested are necessary. In such experimental use, a technique capable of general application can often be attained.

Effective Business Letters, by E. H. Gardner, 1916. (Ronald, \$2) develops a psychology of business correspondence drawn from a survey of many actual letters. Throughout the book, the point of view

of the person receiving the letter and its effect on him are tests by which are tried all the principles suggested.

How To Write Business Letters, edited by W. K. Smart, 1916. (Shaw .70) compares the weak and the strong letter in graphic manner.

How To Write Business Letters by C. R. Wiers, 1911. (Gies & Co., Buffalo, N. Y. .10) is written by the head of the correspondence department in a large company.

The reasons underlying the special appeal

of certain words and phrases and the grammatical foundations for the "airy word castles" of the sales manager are worthy of careful study. To know the "effective value"—the jar to the reader—of different combinations of words is to know the fundamentals of skillful selling.

Business English, by E. H. Lewis, 1916. (La Salle, \$1.40) represents the basis on which all letters, of whatever description, must rest. Applies business principles to the elements of composition and rhetoric and follows out the whys and wherefores of grammatical usage as applied to commercial practice.

Influencing Men in Business. The psychology of argument and suggestion by W. D. Scott, 1911. (Ronald \$1.) While not specifically applied to commercial correspondence, this book is obviously valuable to letter writers.

Essentials of Business English, by P. L. McClintock, 1914. (La Salle \$1.)

Books for the man who wants principles adapted to his own particular department are difficult to find. So many special factors enter into the problems to be met by each business that "ready made" applications rarely fit; that is, "predicated" letters do not fit individual cases.

Salesman's Correspondence Manual, by G. Dartnell, 1917. (George Dartnell, Chicago. \$1.) does quite remarkably adapt principles to specific practice. The title page reads "Handbook of practical suggestions for increasing the effectiveness of a salesman's letters and reports to the home office, communications to customers and probable buyers." An illuminating paragraph on page 87 is "Don't forget that somebody has to read your letter. Use short, simple sentences and short, concise paragraphs," advice that might to advantage be written over every dictator's desk.

Letters for Every Department

SCHEMES for many departments are contained in *Business Correspondence*: How to write the business letter; How to get and hold business by letter; How to handle the distant customer. 3v. 1911. (System \$5.)

For the credit department: *Collecting by Letter*, by W. A. Shryer, 2v. 1913. (Business Service Corporation, Detroit. \$3.) 96 proved plans for collecting money by mail. (A. W. Shaw Co., .96)

For the sales department: *Sales Promotion by Mail*: How to Sell, How to Advertise, 1916 (Putnam \$2). *Sales Correspondence*: Writing the Letter, Follow Ups, Tests and Campaigns, Selling a Service, Handling Trade by Mail, 1914. (Shaw \$1.50)

Books to help the foreign correspondent naturally form an important part in any serious effort to improve the correspondence department at this time.

Foreign Commercial Correspondence, by C. E. Baker, 1901 (Van Nostrand \$1.80) Here are translated into four languages, French, German, Italian, Spanish, the phrases and sentences that are most frequently used in foreign correspondence.

(Continued on page 38)



Little Stories of the Nation's Business

Our varied industries are finding their places in the new war-time mosaic

MORE LABOR and still more is demanded by industries engaged directly in war work and the Government is revolving a plan to bring about a great shift of workmen from the less essential industries to those engaged solely in producing war materials. Something of this nature was attempted in General Crowder's famous "Work or Fight" order, but the arrangement now contemplated will go much further. The plan is to call in War Service Committees of the non-war industries and indicate to them the extent to which the Government thinks men should be released for war work.

Government officials look for the fullest cooperation from the industries that will be affected. There is no law providing for the drafting of labor and Congress has shied at every proposal that authority be given the Government to draft it, but through its control of coal, raw materials and transportation the Government is in position to enforce large labor shifts if there appears any unwillingness on the part of any industry to let its labor go.

Officials who are studying the situation believe the labor shift will draw many thousands of women into industry, since industries that release labor will be barred from recruiting their ranks from men of draft age and will be forced to turn to female labor.

There is still talk of a standardized wage system for Government work and Government officials are giving the subject serious consideration as one possible solution of the alarming amount of labor turnover.

DR. GARFIELD took occasion the other day in speaking to a National Chamber War Service Committee, to answer some few thousand of his fellow-citizens who have been asking why he doesn't increase coal production instead of asking the public to reduce its consumption. Here is his answer: "They say there are billions and trillions of tons of coal in the ground and want me to dig it out. Yes, that sounds reasonable until you think twice and then it sounds very unreasonable. It takes men and more men to dig coal and it takes cars and more cars to transport it."

"Somebody then begins to see the light and says: 'If you can't transport it, take it out of the ground, dump it and haul it by and bye.' That sounds reasonable, too, and there is something in it; but there is something very obstinately in the way of it. Coal mines usually are in narrow valleys, filled with tracks and facilities for dumping coal into the cars. For the most part there is not room for a stock pile."

"Suppose then, they say, you haul it away for a short distance and dump it. Well and good, but that takes cars that might be receiving coal at the mine's mouth and taking it to its ultimate destination."

"Then they say: 'use your cars to haul off your freshly mined coal and use your spare cars for your dumping.' But there are no spare cars. That is what limits the coal supply."

War centralizes. Washington today is headquarters in fact, with its two great staffs, military and industrial. The Nation's Business is extremely fortunate in that it is at headquarters. When our readers wonder what profiteering really is we go across the street and find out for them from an authority like Dr. Taussig. When the knotty points of the "Work or Fight" order are in question, a member of General Crowder's staff helps us to clear them up. If it is transportation, Secretary Redfield; priorities after the war, Paul Cherington; steel prospects, Administrator Replogle; the retailer and price-fixing, Mr. Baruch—all for the information of our readers. And since 300 and more industries are readjusting the country's commercial and industrial fabric literally under its very eyes, The Nation's Business is able to keep its readers informed of tremendous overnight changes. In this larger task we meet daily incidents, at once intensely human, always entertaining and seldom uninteresting. These we publish here in the hope that the executive away from Washington will enjoy the personal, close-up sidelights of War-time Washington.—The Editor.

MR. McADOO, as Director General of Railroads, declared he was eager to move all the coal he could, but that there were many difficulties in the way. He said:

"The ability of the railroads to function in this country depends on motive power, first of all, then sufficient equipment, and underneath that adequate tracks. I ordered last Spring 4,000 locomotives, all the remaining capacity of the locomotive builders of the country. While I was felicitating myself on the prospect of plenty of motive power this winter, there came a cable from General Pershing for 500 additional locomotives. Then on top of that came a request for 1,000 more, 1,500 altogether. Where could he get them? He could not get them unless our orders were displaced. I said: 'Displace our orders. Pershing shall have every locomotive he wants.'"

"If the transportation facilities are not sufficient at times it is not because we do not want to give them to you; it is not because we do not think of you; it is not because we do not realize how important it is; but just remember that General Pershing has got to have locomotives to keep America's boys in the lines in Europe, and that is the reason the service is not as good as it would be otherwise."

"We also needed 2,000,000 tons of steel rails. General Pershing telegraphed over here that he needed a lot of steel rails and again I said: 'He needs them worse than we do; give them to him.'"

HOTEL MANAGEMENT is the latest undertaking of the Government. It will soon have on its hands a lot of "residence halls" at Washington, filled with the clerks who push the pens, operate the calculating machines, pound the typewriters, and file the miles of correspondence that connect our armies with their sources of supply. To perform the managerial function the Government has selected a man who has run some of the country's most famous hotels. To the blocks of dormitories already under construction are to be added apparently still more responsibilities for this official; for on October 1 the Government announced it had let contracts for fourteen additional apartment houses at Washington.

SHIFTING OVER from peace work to production of war supplies is having its effect. In September, the Navy Department announced it had received its first carload of guns for merchant vessels from a plant that used to make nothing more warlike than radiators. Two thousand more of these useful instruments for dealing with submarines are to follow from this one plant.

"HOW TO" Books are handy things, not for amateur gardeners only, but for seasoned business men, who seek new fields of endeavor. A very useful pamphlet of this sort has just been published by the Bureau of Foreign and Domestic Commerce. It sets out all the ways of exporting lumber from the United States, points out the troubles of which a novice should beware, and makes suggestions for improvements in methods which have been followed by many lumber exporters.

THE TARIFF is too perennial an American institution not to come in for some further consideration, one of these days. Meanwhile, a deal of material is being collected, placed in order, and made ready for legislators when they turn again to customs duties.

This material is being gathered by the Tariff Commission. Although out of six members this body has lent one commissioner to help run the telegraphs and telephones of the country, has had a second go to the Cotton Committee, which is to decide momentous questions for the South, and has a third engaged in the duties of the Price-Fixing Committee, which has become a power in the land, it continues to attend to its own proper duties.

As evidence of its persistence in its own field, it has within the month published a monograph in which it undertakes to codify an accretion of statutes which have accumulated since 1789, for the administration of our custom laws. If custom duties are important, certainly there is an equal importance "in a plain and uniform statute to regulate this whole matter," for which a Justice of the Supreme Court longed no less than seventy-five years ago.

COST OF LIVING has universal interest. By reason of its direct relation to activities of such agencies as the Shipbuilding Wage Adjustment Board, which decides questions of wages in view of the current cost of living, data is being collected in many cities. Retail prices for December, 1914, are usually compared with those for March, 1918, with respect to the purchases of the average family. So far as results of the investigations have been announced, they indicate increases ranging in the East from 46% at Cleveland, to 68% at Bath, Maine. Toledo showed 62%, Portland, Maine about the same amount, Detroit 58%, and Chicago 64%. In the West the increase does not seem to have been so great. Upon a partial survey it appears to be 40% at Los Angeles, 39% at San Francisco, and 49% at Seattle. There will soon be figures for other industrial centers, north and south.

RETAIL ECONOMIES furnish a subject on which one member of President Wilson's cabinet has never neglected a chance to speak and to his missionary work is attributed in large measure the order of the War Industries Board directing that retailers discontinue unnecessary wrapping of merchandise. For years Secretary Redfield has taken his purchases of

packaged goods home unwrapped and many a wondering clerk has been lectured by him on commercial economies. He even brought Mrs. Redfield around to his point of view and now comes the Government with an order directing other wives to follow her example.

Paper pulp saved by eliminating useless wrapping will go into munitions of war for educational purposes in Germany.

FOOL IDEAS have made America great. One has but to recall that inventors of aircraft, iron-clad, submarine, pneumatic tire, machine gun, depth bomb, to mention a few of them, were the butt of ridicule when their ideas were germinating. The Government takes suggestions seriously enough to create special bureaus to consider all that pour into Washington in the mails. In giving out a letter the other day containing a foolish suggestion, the Committee on Public Information certainly did not wish to discourage America's native talent. Here is the letter:

"There is an old saying that necessity is the mother of invention. Well, one time I was up against it good and hard, and I did not have any money to buy socks, and it being hot weather, I just cut the whole bottom off and attached the top part to my second toe, cut small hole in the end, and since then I always have saved my wornout winter socks, silk or lisle, and use them in summer. With the high price of cotton, millions could be saved in socks alone."

NARROW SKIRTS will be worn by the women-folks this year, as they have been worn in former years, but underneath this season's decree of fashion from Paris there lies a story, a good story, too. Believing America to be unusually prosperous, French designers got their heads together and originated garments with many voluminous folds, resembling somewhat the gowns our mothers and grandmothers wore in Civil War days.

But they reckoned without knowledge of the work the Conservation Division of the War Industries Board is doing. Some of the models reached the Conservation Division and officials there wondered if they dared to intervene when women's clothes were concerned. A number of leading women were called in, including a cabinet member's wife and the president of the Women's Suffrage Association. Their opinion was asked and with one accord they said they thought American women could do without such dresses in war time.

The French ambassador was then approached and through him the French minister of commerce and finance was reached. And an order went forth from the French Government limiting the amount of cloth that might be used in the design of a woman's garment to four and a-half meters.

And this is why the season's most popular style is called "the Slim Silhouette."

BEEF is consumed by our civilian population at the rate of about ninety pounds a year, per person, says Dr. Alonzo E. Taylor, of the Food Administration, but when the civilian puts on a uniform he requires from 350 to 475 pounds. Naturally when armies are raised by the

millions, enormous inroads are made on the meat supply. But with all this increased demand, Dr. Taylor reminds us the United States still has more beef than France had in peace times.

TROUBLESOME QUESTIONS are solved every day by the great corps of experts in all lines the Government has called together in Washington to help win the war. There is one, though, that no expert yet has been found who could answer. It is: What is a non-essential industry? When the war started, many there were who thought it could be decided in a jiffy and that all there was to do was to make up two lists—one containing the essentials, the other the non-essentials.

But that idea, like many others brought to Washington a year and a-half ago, has gone by the board. The policy finally decided on and the one that seems to come nearest to dealing with the situation is that of eliminating from all industries non-essential uses of labor and materials. Some industries are plainly essential and some few are patently non-essential, but it is the great mass that come within the twilight zone which make it impossible to make up arbitrary lists.

CASH DISCOUNTS are taken advantage of by most business houses, but the Government always has bought its goods on time and often on long time. Many firms have not sought Government business because of the Government's slow pay. Now the War Department has decided to change its policy and will take advantage of cash discounts wherever possible. The general staff will ask contractors who grant cash discounts to the public to state in their proposals the amount of discount they will give the Government for prompt payment of bills. To put itself in position to take discounts the Government in future will have materials and supplies inspected and accepted wherever possible at the point of origin.

WOOL shortage confronts the Government. Soldiers consume twelve times as much wool as do civilians. Manufacturers are running their mills overtime, but the demand is far greater than the supply. Even with the enforcement of conservation measures recommended by the War Industries Board in the manufacture of civilian clothing the Government is not ready to promise that there will be wool enough to go around.

SHIPBUILDING has become one of the country's greatest industries in the brief space of a year. Ships are plunging into the water, North, South, East and West. But all other regions have to take their hats off to the West. The Pacific Coast has delivered to the Government its first million tons of ships, leading the Atlantic Coast yards by 376,000 tons and those of the Great Lakes by more than 600,000 tons. The number of completed vessels delivered by the Pacific Coast is 137. Most of them already are carrying supplies to the American soldiers who are marching toward Berlin.

BICYCLES are ridden by both men and boys, but boys, perhaps, get most out of them. Now the country's boys are called on to make their sacrifices, just as have their elders, towards the winning of the war. The Government has outlined a conservation program for bicycle manufacturers by which the use of steel in the manufacture of bicycles will be cut

about one-third. This will mean a reduction in the number of wheels turned out and somebody's boy will have to go without the wheel for which he has been saving up his money. In addition to agreeing to reduce their consumption of steel the manufacturers have pledged themselves to make savings of other materials. The use of rubber and leather will be discontinued wherever possible and no more nickel finishes will be put on bicycles during the war.

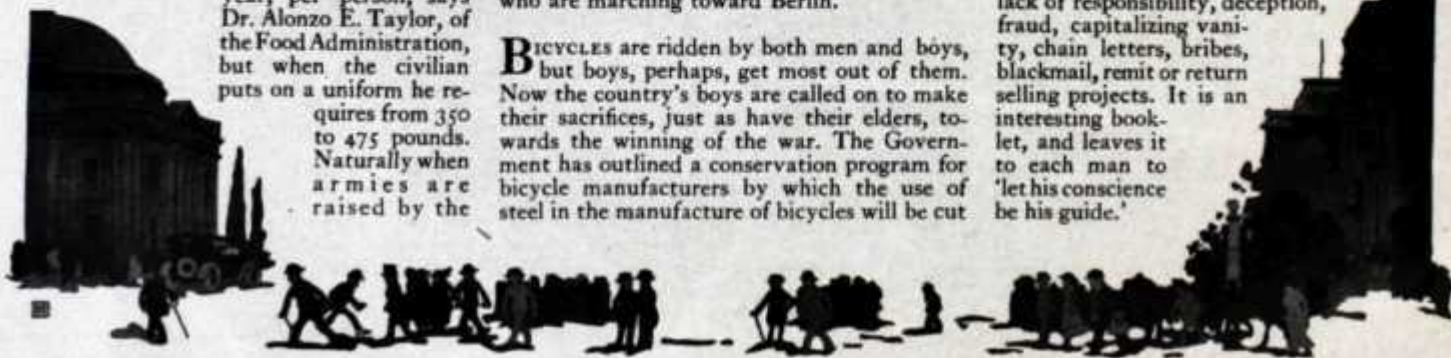
Solicitations Wise and Unwise

NEARLY every day of the year, each and every business man is solicited for some subscription, or donation, or advertisement under the guise of both until the mere mention of the name "solicitor" intimates a nuisance. Many of these solicitations are for good purposes but the greater proportion of them are, to say the least, "shady." All over the country this nuisance has grown, and all over the country it has become one of the functions of Chambers of Commerce to combat the nuisance. One of the most unique as well as the most effective, methods seems to have been devised by the Chamber of Commerce of Rochester, N. Y.

The Rochester Chamber has, for years, followed the usual custom of placing a card in each member's office, politely but firmly, referring all solicitors to the Chamber of Commerce. This card also states that no contribution, donation, advertisement or other contribution will be considered by the Company in whose office the sign hangs until the facts concerning the proposition have been registered at the Chamber and it has been found not to conflict with the principles adopted by the Chamber.

But the Rochester Chamber even went further than this in that it found, after displaying these cards for many years that many interesting cases developed and the solicitor used many ingenious devices for "getting the money," all of which tended to get by the innocent and busy business man. Therefore, it issued a booklet, whose title, "Solicitations, Wise and Unwise" tells pretty well the story of what it is. This booklet further says "The Chamber of Commerce does not endorse solicitation projects. It is not its function to decide for anyone, what he shall subscribe, or what cause he shall support; but rather to gather facts upon which he can intelligently base his own actions."

The first chapter deals with public benefactions honestly and efficiently conducted and fully accounted for, under a responsible local management. The second chapter is on objects which the public cannot reasonably be asked to support. The others deal with donations solicited in the guise of selling, commercial ventures posing as public benefactions, local organizations exploited for the gain of out-of-town individuals or organizations, self-appointed solicitors, inefficiency, lack of responsibility, deception, fraud, capitalizing vanity, chain letters, bribes, blackmail, remit or return selling projects. It is an interesting booklet, and leaves it to each man to 'let his conscience be his guide.'



ABERTHAW — for Winter Building

Methods—not temperatures are the main features in the success of winter building.

Aberthaw methods overcome winter hazards because of the precautions taken and care exercised in supervision.

Applied to your building now they may be the means of insuring occupancy for you next spring.

A consultation on your building problem does not obligate you in any way.

Send for our booklet "Winter Work Built by Aberthaw." It explains.

ABERTHAW CONSTRUCTION CO.
BOSTON, MASSACHUSETTS





WESTINGHOUSE ELECTRIC & MFG. CO. FOUNDRY



MACHINE SHOPS NO. 1 AND 2



FORGE SHOP



PATTERN STORAGE



ERECTING SHOP

A LARGE PLANT for the Production of TURBINE UNITS



ENGINEERS and
CONSTRUCTORS
A purely engineering
organization with
nothing to sell except
services.

W.C.K.

BUILT last year at South Philadelphia for the Westinghouse Electric and Manufacturing Co. these immense works are playing a vital part in waging the war. Their output is utilized for U. S. destroyers and the merchant marine.

Designed and constructed by W C K the work was done under high pressure. For example, ten and a half acres were put under roof in nine months;—10,000 tons of steel were erected in ten weeks;

Thirty-four years of engineering and construction experience have equipped us to cope with any building problem.

WESTINGHOUSE CHURCH KERR & CO. INC.

Engineers and Constructors

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CONWAY BUILDING

SAN FRANCISCO
SOUTHERN PACIFIC BUILDING

The Southland's Nocturne a Saga of War

(Continued from page 27)

sunset through a cleft in the Rockies. Then, a year ago last July, a squad of men levelled the fields of sugar-cane that looked out on the bayou near the Morgan City docks. Swiftly where the cane had grown, up rose the towering ways. Nearby the machine shops and saw-mills took form and sounded across the bayou a message it had never heard before.

The magic of ship-building took hold of that hyacinth-starred bayou and that quiet town. From 7,000, Morgan City swelled to a 12,000 population. The easy-going Louisiana folk, from languid talk of sugar and rice and cotton and fishing and hunting, grew to talk, dream and live ships. And at last, from these same ways on Bayou Boeuf, there glided into the pastures of the water-hyacinths, the 3,500-ton Ferris type wooden steamship *Amoron*—the first ocean-going wooden steamship ever launched in Louisiana.

That's Morgan City's record. And it looks to the Union Bridge and Construction Company of Kansas City, a bridge building firm that now makes ships, much as Pittsburg looks at Carnegie. Though H. K. Beltzer, Vice-President and Chief Engineer of the Company, in charge at Morgan City, rather quietly deprecates the size of his contribution to the American merchant marine.

But now, though the water-hyacinths still crowd close to the launching end of the ways, they're waging a losing fight. And clear water that holds the products of that busy shipyard, has supplanted in that section of Bayou Boeuf, right in sight of the Evangeline oak on the other bank, the floating, graceful, star-lit meadows through which the geni of the bayou were wont to go their separate and enigmatic ways.

Romance? The wooden shipyards of the South are vibrant with it. The "Dreamy South?" yes, indeed. The South of dreams of an American merchant marine, manned by Americans, officered by Americans, trained in the United States Shipping Board's navigation and engineering schools, ploughing with bows of oak and pine and steel the roadsteads of distant ports; bringing back to America the salt sea glory that was hers before the clipper fleets degenerated into coal barges or rotted at drunken wharves.

And the wooden-ship builders of the South are doing their share—and a little more—to make that dream come true.

STATEMENT required by the Act of Congress of August 24, 1912, of The Nation's Business, published monthly at Washington, D. C., for April 1, 1918.

WASHINGTON, D. C.: Before me, a Notary Public in and for the state and county aforesaid, personally appeared John G. Hanrahan, Jr., who having been duly sworn according to law, deposes and says that he is the Business Manager of THE NATION'S BUSINESS, published by the Chamber of Commerce of the United States of America, and that the following is to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations, printed on the reverse of this form, to-wit: 1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher—Chamber of Commerce of the United States of America, Washington, D. C. Editor—Merle Thorpe, Washington, Managing Editor—T. H. Uetzel, Business Manager—John G. Hanrahan, Jr.; 2. That the owners are: Chamber of Commerce of the United States of America, Washington, D. C. Said body being an incorporated organization under the laws of the District of Columbia, its activities being governed by a Board of Directors, the officers and members of which are as set forth in Exhibit A, attached herewith; 3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: none.

JOHN G. HANRAHAN, JR.
Business Manager, THE NATION'S BUSINESS

Sworn to and subscribed before me this 21st day of October, 1918.

EDWARD CULLUM, Notary Public.
My commission expires January 30, 1920.



Knowing that you are right

YOU may use Air-Plane Rexpar Varnish for any normal or abnormal varnish purpose and know in using it that Air-Plane Rexpar Varnish will meet your every requirement. Time now is too valuable to waste testing varnishes when recent test results are available.

Take the result of the United States Government tests. The United States Signal Corps tested varnishes for months. There were thirty-four tests to be met. Air-Plane Rexpar Varnish met them all. The largest individual order ever given for any varnish was given The Sherwin-Williams Company when the tests were completed.

Air-Plane Rexpar Varnish has met every normal demand and test of war, home and industry; sun, storm, heat, cold, light, atmosphere, oils, gases, time and change alike are resisted by this new airplane varnish.

Air-Plane Rexpar Varnish comes in all size packages for all purposes. It is on sale at Sherwin-Williams Branches, Depots, Stores and Agencies everywhere.

The price is much lower than the quality would lead you to expect.

The Sherwin-Williams Company

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Branch Offices and Warehouses in all important cities

SHERWIN-WILLIAMS PRODUCTS
PAINTS AND VARNISHES

DYESTUFFS. COLORS. PIGMENTS. CHEMICALS. INSECTICIDES.

DISINFECTANTS. WOOD PRESERVATIVES

The Varnish on Airplanes Shall

1. Protect wood.
2. Protect doped linen.
3. Protect doped cotton.
4. Protect metal.
5. Be long oil varnish.
6. Resist air.
7. Resist light.
8. Resist water.
9. Resist natural gas.
10. Resist illuminating gas.
11. Have proper brushing qualities.
12. Have proper flowing qualities.
13. Have proper covering qualities.
14. Have suitable body.
15. Dry dust free rapidly.
16. Harden rapidly.
17. Be elastic.
18. Be clear.
19. Be transparent.
20. Be highest quality.
21. Match a fixed color solution.
22. Be durable.
23. Not flash below 95 degrees Fahrenheit.
24. Not whiten under water.
25. Not dull under water.
26. Not show defects under water.
27. Stand air test during application.
28. Stand air test during drying.
29. Meet a fixed setting test.
30. Meet a threefold drying test.
31. Meet a severe bending test.
32. Be inspected before shipment.
33. Be inspected at destination.
34. Prove durable under fixed test. Sherwin-Williams Air-Plane Rexpar meets all these requirements.





Unarmed Arms of the Service

Men from the battle front who have been holding the line for months and years complain of the monotony of war. The soldier's life in the trenches soon ceases to be a novelty and becomes a tedious routine.

The morale of the army is of supreme importance and the greatest military authorities of the world are enthusiastic in their praise of the organizations which make it their business to keep the soldier in good spirits.

This work, like that of the Signal Corps, has been more highly developed in this war than

ever before. Huts for amusement, comfort and recuperation of the fighting men are in the trenches as well as behind the lines. The unarmed workers go about their duties under shell fire as coolly and as self-forgetfully as the telephone men of the Signal Corps who are frequently their neighbors, and who keep intact, often under a hail of bullets, the indispensable lines of communication.

It is for us who remain at home to support these unarmed heroes to the utmost, with our gifts, our labor, and our unbreakable morale.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
One Policy One System Universal Service

JOHNS-MANVILLE
Asbestos



WHEN you have read this issue of *THE NATION'S BUSINESS*, won't you pass your copy on to a friend—one, who, like yourself, will be interested in reading the highly important messages that it contains from some of the Administration's biggest executives.

And will you drop the Circulation Manager a line telling to whom you have loaned your copy? Such a service would be indeed greatly appreciated.

LE PAGE'S
CHINA CEMENT
STANDS HOT AND COLD WATER

Priority After Peace Comes

(Continued from page 14)

justed to civilian requirements. It might be too large, it is more likely that it would be too small for urgent civilian needs. But in any case there would at once be a scramble for it which ought to be discounted and guarded against in advance. It is perfectly clear that in any such scramble as this either a policy which would permit mills with large capital to take advantage of the situation, or a policy which would undertake to favor exclusively the mills with small capital, would be equally unwise so far as the interests of the public at large are concerned.

In the third place, it seems highly probable that there would be at once a very considerable cancellation of government contracts. The direct financial losses from such cancellations would, of course, be adjusted, but the commercial losses which would be inevitable, would be extremely difficult to take care of. Manufacturers would find themselves, perhaps, in mid-season with absolutely no adequate information on hand such as they ordinarily are able to secure by means of samples and salesmen's reports and the other market testing devices, as to the size and character of the probable market. Some of the army material, no doubt, could still be produced as ordered with a view to its subsequent sale on private account. Some of it could be re-dyed, re-finished, and made available for civilian use. But as a whole the industry would be without goods, without a market, and in ignorance of conditions.

In the fourth place, there would arise a large group of questions concerned with speculative abuses of both the raw materials and finished product markets. With all the difficulties that are sure to arise in the way of readjustment the speculative features will be exaggerated from almost every conceivable angle. Unless the leaders in the industry themselves undertake to forestall these conditions all of the other factors making for uncertainty are sure to be magnified.

These four suggestions of what might be anticipated in one industry are the merest hint of probabilities in that industry alone. Some industries would be more seriously affected than this, some less. Iron and steel will face a revolution; brass-working and fire-arms will have to start from the ground. No industry will escape entirely and none can long delude itself into thinking it will resume business where it left off—not even glass painting.

Neither these industries nor the public, for the serving of which they exist, could be expected to fare well by being left to their fate. In the case of the wool industries, for example, suppose there should be a great public need of blankets. In normal times this need could be forecast and provided for. But in times of resumption with none of the usual market indications at hand what protection could there be against a blanket shortage on the one hand, or a serious over-production of blankets, on the other? Again, suppose a small mill which had always, before the war, made fancy dress goods should want to resume its accustomed work. How could it be ascertained what it ought to make and how much, in order that none of the inadequate wool supply should be wasted?

Peace Problems Greatest

THESE problems of priority within industries have not been encountered in so urgent a form in the course of conducting actual warfare. But when time of restoration comes they will be conspicuous at every turn. It will not be sufficient to give one industry priority over another. The industries themselves will require subdivision and firm treatment if the pub-



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Government demand for Royal Typewriters is so heavily taxing our facilities that in the event of our inability to meet your immediate requirements we know you will patiently accept this condition.

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Fire Insurance

Buildings, Equipment, Contents and Personal Property.

Tornado Insurance

Against damage or loss by high winds and tornadoes.

Explosion Insurance

Inherent hazards of production processes and bomb and explosion plots of cranks, enemy sympathizers and propagandists.

Full War Cover Insurance

Against Bombardment, Explosion, Strike, Riot, Insurrection, Invasion and War.

Use and Occupancy

Insures profits and fixed charges during interruption caused by Fire, Explosion or Tornado.

Sprinkler Leakage

Covers loss by water damage from Sprinkler Systems.

Rent and Leasehold

Loss of rents or occupancy as a result of fire.

Builder's Risk Insurance

Covers buildings in course of construction.

*The Insurance Company of North America, now approaching its 127th year and strengthened financially and in experience because of its long service to the property owners of the Nation with which it has "grown up," is fully equipped to meet the complex needs of the hour.

Check off the forms indicated above, in which you are interested most and call in the local agent of the company. There are more than 10,000 of them in the United States, Canada and Cuba.

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Oldest American Stock Insurance Company

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On hulls and cargoes, both domestic and foreign shipments.

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Covering perils of war on both foreign and domestic shipments.

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On domestic and foreign shipments of cotton.

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Parcel Post Insurance

Packages shipped by Parcel Post.

Registered Mail Insurance

Packages shipped by Registered Mail.

Automobile Insurance

Fire, Theft, Collision and property damage on pleasure cars and commercial trucks.

Commercial Travellers

On samples and equipment of salesmen.

lic is to be served. The normal conditions of both supply and demand will be slow in returning. In the meantime intelligent foresight plainly offers a safer guard against maladjustment than can be found in blind chance. The old problems of priority as between industries will persist. To them the problems of priority with industries and between products, or between actual concerns, will be added.

The obvious way out of all these difficulties is to see them now, and to get ready for them. To such a task, remote as it may seem, it is not too early for the War Service Committees to address themselves at once. In some cases well-defined lists showing "priority for industrial resumption" would be comparatively simple to work out if it is undertaken in time. In others it might be more difficult. But in every industry, without exception, much could be done toward minimizing the seriousness of the problems of resumption if these problems are recognized as being sure to arise, and if preparations are made for meeting them even while the more immediate task of winning the war is uppermost.

New York to Bagdad

(Continued from page 23)

a hundred miles or less from established railroads has been suggested and its early feasibility considered in England. In South America, before war claimed all the airplane production efforts of the world, a project for the transport of ore from Andean mountains extremely difficult of access, also had been conceived.

The maintaining of coastal patrols by airplane already is in force, abroad and in the United States, and has been forced by submarine activities and the struggle for the seas. The United States as well as Great Britain and France, through their various committees on post bellum activities and utilization of resources, have prepared for the continuance of permanent coast patrols in peace and war. They each have foreseen, also, an ultimate necessity for a general policing of the air, domestic and international, although they have necessarily been inactive before the many problems of adjustment this may entail. These are the problems of flying and landing rights, of the establishing of internationally prohibited areas, and of nationally prohibited areas above fortifications, cities and other places vulnerable or vital, of custom regulations and the means of their enforcement, of rules of "the road" and the standardizing of penal codes in their dealings with trespass and damage from the air, of the salvage of aircraft by ships or other aircraft, of quarantine and immigration regulations and their enforcement, armament regulations, and others. Tentative solutions of these many problems have been suggested, but none is yet applicable.

The carrying out of scientific surveys and explorations will be little more than a conversion to other ends of effort of the same quality now used in aerial military observations and excursions into enemy territory. The making of maps is a daily work above each front and a new and distinct branch of cartography now exists, with new symbols and expressions. It is proposed to map the United States as soon as war is done, establishing for the purpose an organization not dissimilar to the geodetic survey, with methods also somewhat similar. Aerial maps are the most invaluable of military intelligence; and their service will be relatively as important commercially. Scientifically they are priceless, inasmuch as they are made from



NEW UPTOWN OFFICE IN NEW YORK

The National City Company, in establishing its new office in New York at the southwest corner of Fifth Avenue and Forty-third Street, aims to provide for investors generally, and for bond owners in particular, a more convenient service.

A special department has been provided for women investors, and they may consult, if they wish, women who have been specially trained for this work.

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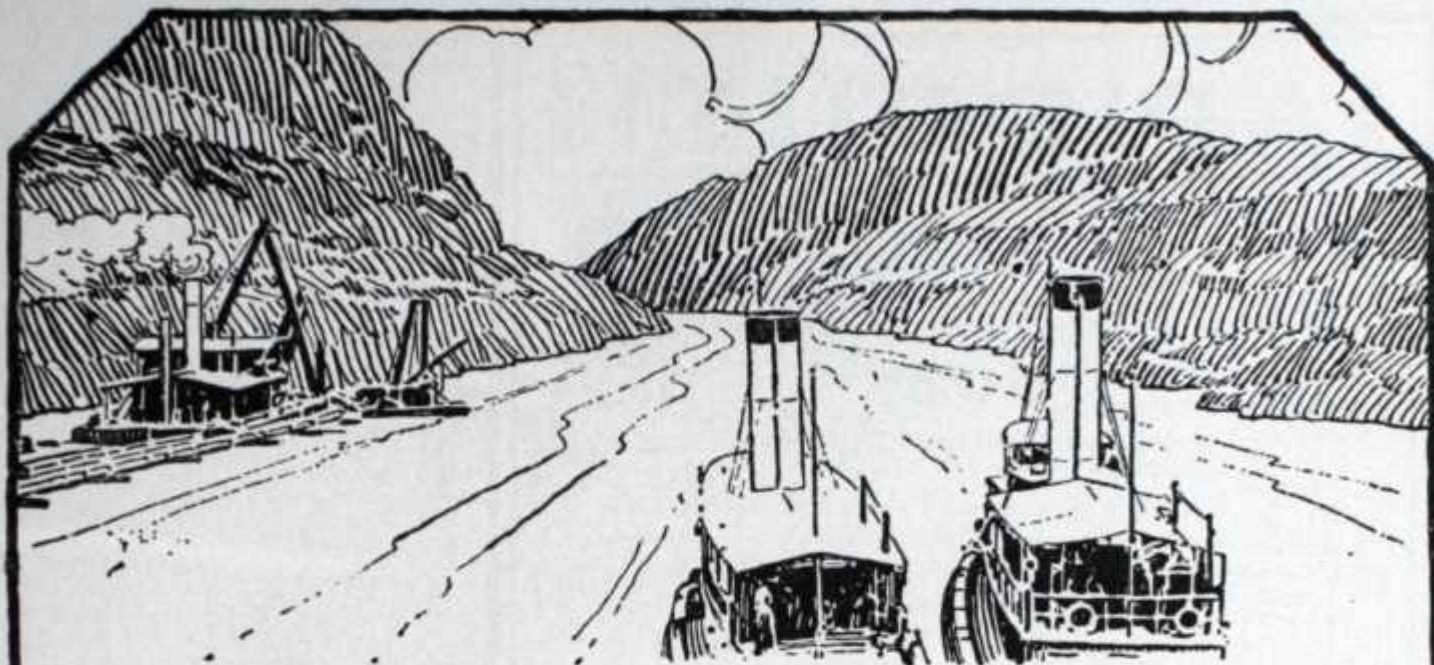
The B/L COLLECTION BANK OF CHICAGO



This bank is particularly well equipped to serve manufacturers, jobbers, wholesalers, and dealers located in States West of Pennsylvania to the Pacific Coast. We offer the facilities of a Chicago checking account with or without a line of credit. Our Collection Department is a special feature of this service. We make a specialty of handling Bill of Lading collection items. Correspondence invited.

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One of Chicago's old conservative banks doing strictly a commercial business. Established 1869



How Is Your "Culebra Cut"?

The Panama Canal is a clear passageway as far as the Culebra Cut. But Gold Hill has a way of slipping into the cut. And until dredges can clear the channel, the industrial schedule of the world is out of gear.

How about your own canal? The intestinal canal is a clear passageway as far as the large intestine. There, if you become constipated, waste matter is allowed to stagnate. It becomes unnaturally dry and undergoes abnormal fermentation and putrefaction. Germ activity is increased. Your whole system is out of gear. Result, the production of irritating and poisonous substances, which are absorbed into your blood and carried all over your body, liable to produce disease anywhere. The longer such stagnation is allowed to exist, the harder it is to clean out the canal. 90% of human disease originates in the "Culebra Cut."

If engineers tried to blast out the slide from Culebra Cut they would have more slides to cope with. If you try to blast out accumulated waste from *your* Culebra Cut with pills, salts, castor oil or purges, you will increase your constipation—and next time you will have to take stronger medicine in a larger dose.

You can't dredge *your* canal.

You *can* clean it out with Nujol.

Nujol softens the mass, and supplies the intestinal canal with sufficient moisture to replace the deficient mucus. It causes the obstructive waste matter to pass gently out of your system at a regular hour, absorbing and removing the poisons as it goes. Nujol regularly keeps the traffic of your mind and body operating on schedule.

You admire the Panama Canal system. Why not safeguard your own? Your druggist has Nujol.

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Warning: Nujol is sold only in sealed bottles bearing the Nujol Trade Mark. All druggists in U. S. and Canada. Insist on Nujol. You may suffer from substitutes.

"Regular as
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Write for free booklet "Thirty Feet of Danger" to Nujol Laboratories, Standard Oil Co. (New Jersey) - 50 Broadway, New York City

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You know that even the best concrete floor can be *improved*?
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Specify Lapidolith for new concrete floors to make sure that
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And they use it on old concrete floors which were originally
laid before Lapidolith came into general use.

The action of the liquid chemical, Lapidolith, makes the
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Applied by unskilled labor at nominal expense.

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LOS ANGELES

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serial photographs the preservation of which
forms an inestimable treasure of record. It is
not unlikely, from the statements of the mem-
bers of government committees in Europe and
here, that a systematic mapping of millions of
square miles of land will be set about soon after
the war has ended.

The exploration value of the airplane has not
been tested in any rewarding way, but its
proved powers make it capable of employment
in exploring expeditions. At least two such ex-
peditions, one into Dutch Guinea, were pro-
jected before the war attained its fullest scope.
The merit of the airplane in such work is the
absence, to it, of barriers of ice or swamp or
forest that are impassable, although the diffi-
culties of forced and unprepared landings re-
main.

Beyond these uses of the airplane are the
private and sporting uses; and the administra-
tive uses, which today are in a sense chiefly
military. The private uses of the airplane,
were it not for the war, but with the number
and perfection of planes developed by the war,
might be as numerous as those of the automo-
bile. There is a limit to such employment only
with the limit of the powers of aircraft as exis-
tent and developable. The sporting uses al-
ready have been demonstrated in many inter-
national and more restricted meets. It is of
interest that the post bellum production of cer-
tain American airplane factories is designed to
be of small planes, moderately priced, for fam-
ily use, and of planes for comparatively inex-
pensive sporting use. The administrative uses
of the airplane have been created solely by the
war, in such emergencies as frontier unrest or
the urgent reforming of disordered troops;
their interest in the future is in the possibility
of territorial governors and frontier admin-
istrators (as now is advocated for Imperial
Britain) employing them henceforth.

This future of the airplane, a future presaged
by the motive power and achievements already
demonstrated, will have inevitably, of course,
an effect on industry and society in general
that is incalculable at present. Perhaps not
the most, but the best that can be done today,
is the establishment of educational sources
wherefrom a knowledge of an important factor
of our progress can be had as easily as it can
be had of the automobile.

Those Letters You Sign

(Concluded from page 28)

Gathered under headings such as Orders and
Commissions, Complaints, Drafts, Letters of
Credit and Shipping, are sentences and para-
graphs covering many of the situations that
arise in general export trade. By means of an
index specific points included under these gen-
eral heads are readily found.

*Pitman's Dictionary of Commercial Corres-
pondence in English, French, German, Spanish,
Italian.* 1910 (Pitman 7s 6d). Business terms,
phrases, abbreviations, 4th ed. (Pitman. 8s)

For French correspondence: *Pitman's Com-
mercial Correspondence in French* (Pitman .85);
Phraseological dictionary of commercial cor-
respondence in the English and French lan-
guages with an appendix containing lists of
commercial abbreviations, geographical names
principal articles of commerce, etc., by C.
Scholl. 1911. (Hachette, Paris, \$1.13 imported)

For Spanish correspondence: *Spanish Com-
mercial Correspondence*, by H. A. Kenyon, 1907
(George Wahr, Ann Arbor, Mich. .75); Phrase-
ological dictionary of commercial correspon-
dence in the English and Spanish languages,
with an appendix containing lists of commer-
cial abbreviations, geographical names, prin-
cipal articles of commerce, by C. Scholl. 1911.
(Hachette, \$1.13 imported)



Salt pork for breakfast, salt pork for dinner, salt pork for supper

Do you remember? You do if you lived in a village or on a farm thirty or forty years ago.

Fresh meat was in those days hard to get. The refrigerator car had not then been developed, and therefore it was practically impossible to ship perishable meats from the city packing houses into rural communities.

In the larger towns the local meat shops did their own meat dressing, but on the farms each family did its own butchering in the winter and used salted and pickled meats in the summer. The small villages depended on the farms in the winter for what meat they could get.

Today there is no village so small, and few farms so isolated, that fresh, sweet meat is not regularly available at all times.

This change came with the establishment, by the large packers, of a nation-wide system of meat distribution into the small towns and rural communities.

This system is known as the "Car Route" system. It means that practically every village and small town in America is visited at regular intervals

—in many cases as often as three times a week—by refrigerator cars loaded with fresh, sweet meats.

Following closely on the heels of the development of the refrigerator car, an achievement in which Swift & Company played a big and vital part, came the development of the car route system.

Here again Swift & Company played a leading role, as it was they who put into operation in 1890 the first car route.

This first route has grown and expanded until today there are hundreds of such routes operated out of the various Swift packing houses.

Today millions of people who live on farms and in villages rely on car route distribution, to a great extent, for fresh meats.

Thanks to the initiative and progressiveness of America's packing industry, they are no longer confined to an unchanging diet of salted and pickled meats.

Fresh beef and meats of all kinds—of a quality that is recognized as the standard of the world—are today staple foods on American farm and village tables.

Swift & Company, U. S. A.

A nation-wide organization owned by more than 22,000 stockholders



NOT HOW MUCH WE CAN MARSHAL FOR WAR, BUT HOW SOON

TIME is of the very stuff of victory. In this war everything depends on the saving of time—that is, on the speed with which you, like every other manufacturer, can turn out ships, food, guns, or other instruments of war.

We must do it now; not later. No time must be lost. Every possible hour and minute must be made to yield a war equivalent. That is why American business has come to regard accurate instruments, such as the Kasten Time Stamps and Time Recorders, for the measuring and checking of time as an absolute necessity. And Kasten Time Stamps and Time Recorders are doing that work in a way that leaves nothing to be desired.

They are making the night watchman more efficient; they check the laborer's productive hours; they mark to the minute every bit of mail; they put a handle on every instant of the day. They are indispensable to efficient business.



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TIME
DATING
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HENRY KASTENS

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KASTEN
WATCHMAN'S
PORTABLE
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\$1,000,000 SAVED

in handling 2,750,000,000
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Now, when the saving of labor is an economic neces-

sity and a patriotic duty, let us show *you* how to save money. Writing today for Catalogue No. 4 is the first step.

The Mail-O-Meter Sales Company

39 SOUTH LA SALLE STREET

CHICAGO, ILLINOIS

What is Profiteering?

(Continued from page 3)

of profiteering. The flour-milling industry, for example, and the sugar industry, are under certain definite limitations and restrictions, fixed by the Food Administration, of which the design and the effect are to prevent profiteering. Under such circumstances, profits made by a flour mill or a sugar factory under observance of the limitations set by the Food Administration or by any other branch of the Government, even though large, should not be the occasion of criticism. Under any limitation of prices whatever, some enterprises will always be able to conduct their operations more successfully than others, and some will make handsome profits while others are making little or nothing.

"The manner in which large profits secured in this legitimate way shall be dealt with by Congress is for that body to decide. The excess profits tax will be arranged by the national legislature according to its convictions regarding the just manner in which the citizens shall contribute to the burdens of the war. Whatever taxes Congress levies on the profits earned by individual concerns should be unhesitatingly and freely paid. But whatever earnings and profits can be made, within the limitations I have mentioned, may also be unhesitatingly and freely made.

"In a word, my view is that an industry best performs its service to the country by attaining, within the limits of fair business practices, of Government regulation, and of right standards of employment, the highest productive efficiency. Profits earned in this way can give no ground for criticism or for accusation of unpatriotic conduct."

Very truly yours,
F. W. Taussig.

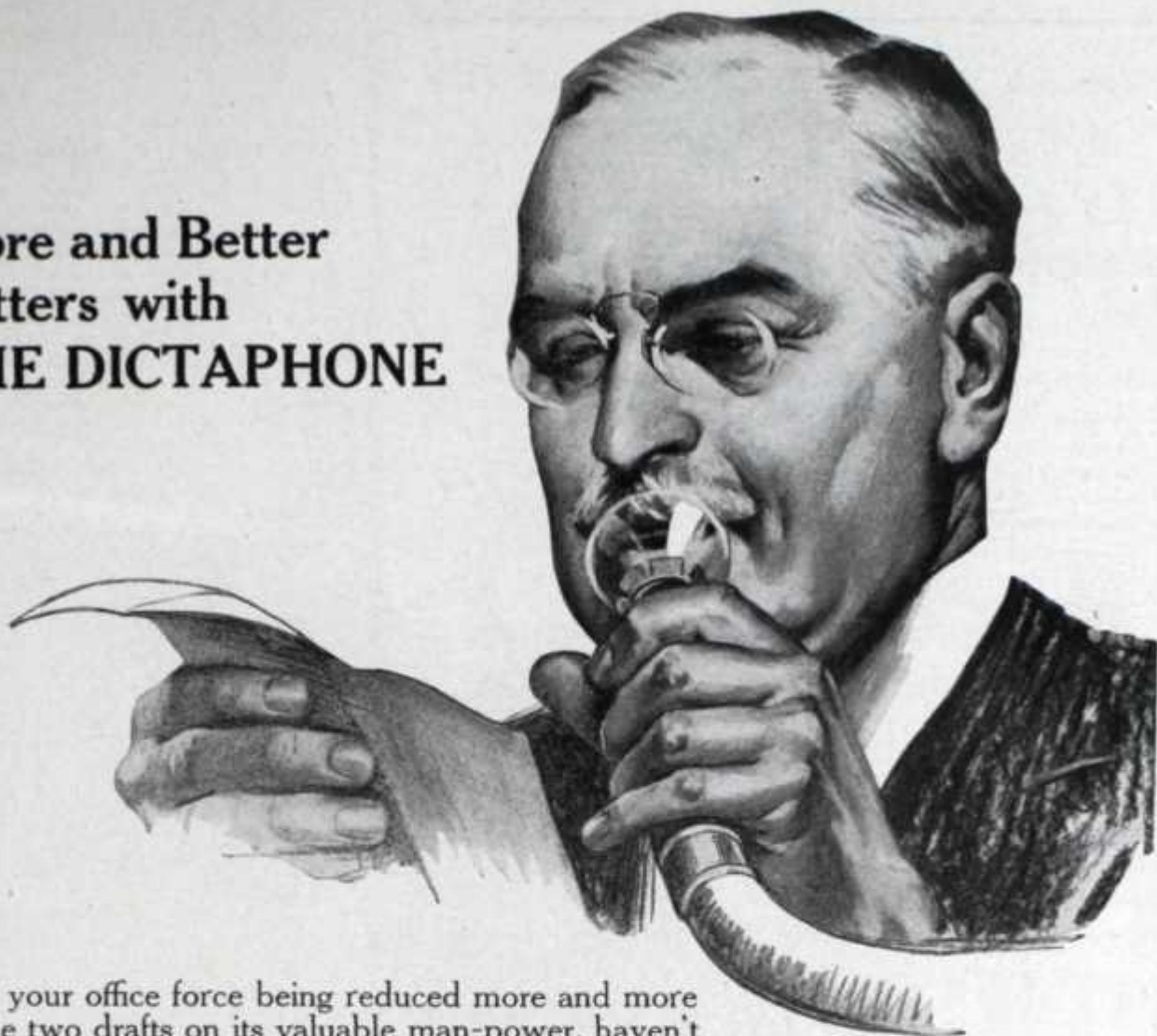
OUTRAGEOUS orders issued by the Government cause a lot of grumbling, but American people are patriotic and as a rule accept cheerfully the most restrictive measures once they are convinced that self-denial is necessary to win the war. When Fuel Administrator Garfield issued his order prohibiting the use of pleasure cars on Sunday hundreds of persons wrote in complaining. But the situation, Dr. Garfield explains, was in many respects similar to the coal situation of last winter. Then a man got on the train and came to Washington to see the Administrator. He was admitted to his office and talked for fifteen minutes before Dr. Garfield could get in a word. Finally he said:

"Now, Doctor, don't you yourself think this is the most outrageous order you ever heard of?"

"Certainly I do," the Doctor replied. "I think it is the most outrageous order I ever heard of, but you haven't stopped to think that it was the most outrageous situation we ever heard of and it had to be dealt with."

MILADY'S HAT comes to the home in a great box. Inside the box there is a deep layer of tissue paper and the hat itself is securely wrapped in many sheets of tissue. One of the commodities in whose use the Government is urging the strictest economy is paper and the Conservation Division of the War Industries Board has asked milliners throughout the land to cut down the amount of tissue they have been using for wrapping hats.

More and Better Letters with THE DICTAPHONE

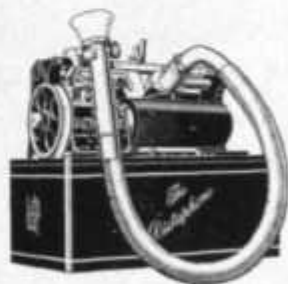


With your office force being reduced more and more by the two drafts on its valuable man-power, haven't you the greatest need for more and better letters?

By eliminating the shorthand operation, The Dictaphone gives you nearly twice as many letters per day, or the same number of letters with a considerably smaller office force.

It also gives you better letters, because it's more natural to let your "personality" go into The Dictaphone mouth-piece than it is to dictate to a human being.

A demonstration in *your* office, on *your* work will prove it to you. Phone nearest branch office or write us. Also ask for valuable, free book, "The Man at the Desk."



*"The Shortest Route to the
Mail Chute"*

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Dealers Everywhere

Write for booklet, "The Man at the Desk"

There is but one Dictaphone trademarked "The Dictaphone," made and merchandised by the Columbia Graphophone Company



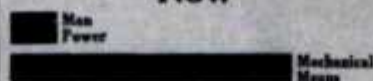
"Buy War Savings Stamps"

What are you going to do about MAN POWER?

In the Past



Now



Mechanical conveying of your materials and products is the only practical answer.

Because of accurate knowledge and sound judgment employed in their design, our installations of mechanical conveying apparatus insure a proper relation between first cost and savings effected.

We will make the designs only, or make the designs and superintend your own constructors, or design and install the complete equipment. We operate on a basis satisfactory to you, and results must be satisfactory to you. We suggest a conference on this important subject.

WEBSTER ENGINEERING COMPANY

FRANK D. CHASE, Inc.

INDUSTRIAL ENGINEERS
SUCCESSORS

People's Gas Building
Chicago

Whitehall Building
New York

Work or Fight

(Continued from page 18)

cally unable to serve in the military forces, or by boys under military age, or men over the military age, or by women.

The Job of the Draft Board

THE Draft Boards are not authorized to extend the list of occupations or employments set out in the rules issued to the Boards, but are only authorized to enforce a change of employment or occupation provided a registrant is engaged in an occupation or employment specifically mentioned in the rules as temporarily non-productive.

The instruction issued to the Draft Boards defines the words "stores and other mercantile establishments" as including both wholesale and retail stores and mercantile establishments engaged in selling goods and wares.

I believe that the Boards are administering this rule sensibly and that not much difficulty is being experienced. Of course, registrants who are engaged in these prohibited occupations change their own employment without compelling the Local Boards to take action. However, if a change is not made the Local Boards are authorized to cite any registrant believed to be employed contrary to the rule to appear before the Board and submit his case for determination.

The United States Employment Service maintains throughout the country agencies that are directed by the Department of Labor to co-operate with the Local Boards for the purpose of furnishing employment to men who are engaged in these prohibited occupations so that the flow of labor may be in the direction of the industries in which labor is sorely needed.

The Work or Fight Rule is quite generally misunderstood in one respect. The Rule does not require that a man, in order to remain in a deferred classification granted him because of dependents, be engaged in any definite work. It only requires that he shall not be engaged in one of the occupations named in the rules. No attempt has been made to define or prescribe the employments in which he must engage. The choice of his employment lies with him so long as he is not engaged in a prohibited employment.

The demand for labor is so great that it is known registrants who are compelled to change their employment readily find other work at good wages.

We often receive inquiries as to whether or not a particular industry, occupation or employment is regarded as necessary to the maintenance of the Military Establishment, or the effective operation of the military forces, or the maintenance of national interest during the emergency. When the Selective Service Law was enacted in May, 1917, Congress provided that "persons engaged in industries, including agriculture, found to be necessary to the maintenance of the Military Establishment, or the effective operation of the military forces, or the maintenance of national interest during the emergency" could be granted temporary discharge under rules prescribed by the President.

When the law was amended in August, 1918, this provision was modified so that it now reads that "persons engaged in industries, occupations or employments, including agriculture, found to be necessary to the maintenance of the Military Establishment, or the effective operation of the military forces, or the maintenance of national interest during the emergency" may be given deferred classification. There is no list of enterprises, occupations or employments definitely determined to be within the provision of the Act of Congress. The determination of this question is left entirely



Trend of business in America's great food-producing district is East-West, with Omaha the natural marketing and central distributing point.

Open an Office in Omaha

This district is growing rapidly in population and wealth. Its development will not be retarded by readjustments following the war.

Make it a "zone" in your selling plan and work intensively from an office or a factory branch in Omaha.

Authentic information on Omaha and territory (in detail along any line desired, as well as general) furnished on request. Exhaustive survey just completed.

Write to

Bureau of Publicity—Room B
Omaha Chamber of Commerce
OMAHA

Irving Trust Company

FREDERIC G. LEE, President

Woolworth Building, : : New York

MEMBER OF

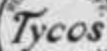
NEW YORK CLEARING HOUSE
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WHEN you have read this issue of THE NATION'S BUSINESS, pass your copy on to a friend—one, who, like yourself, will be interested in reading the highly important messages that it contains from some of the Administration's biggest executives. And will you drop the Circulation Manager a line telling to whom you have loaned your copy? Such a service would be indeed greatly appreciated.



Tycos

TEMPERATURE INSTRUMENTS
INDICATING-RECORDING-CONTROLLING

THAT manufacturer expecting much through the installation of indicating, recording and controlling Temperature Instruments will realize in full such expectations and derive profit—if he specifies *Tycos* products.

*We shall be glad to give detailed description
of any of our temperature instruments.*

LIST OF PRODUCTS

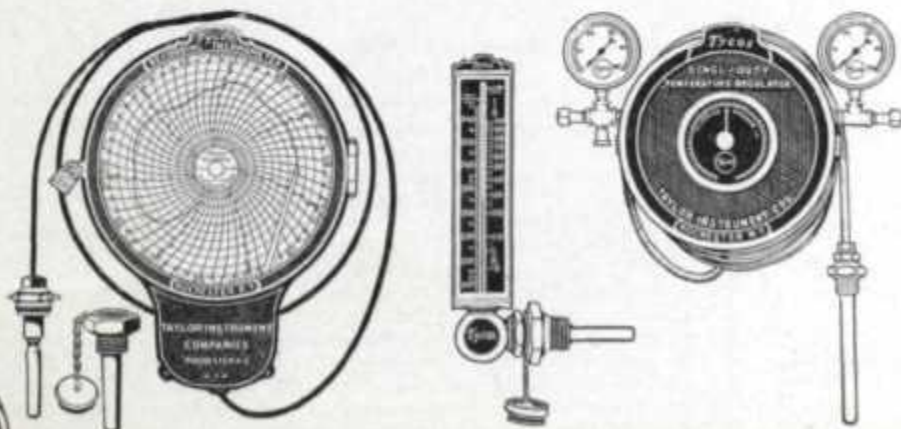
Industrial Thermometers (angle and straight stem)
Capillary Recording Thermometers
Self-Contained Recording Thermometers
Capillary Index (or Dial) Thermometers
Thermoelectric Pyrometers
Recording Thermoelectric Pyrometers
Fery Radiation Pyrometers
Temperature Controlling Devices
Time Controls

Capillary Electric Contact Temperature Controls
Laboratory Engraved Stem Thermometers
Hygrometers (wet and dry bulb) Indicating and Recording
Outdoor and Household Thermometers
Thermographs
Medical and General Use Thermometers
Coal Oil Testing Instruments
Hydrometers, M. C. Vacuum Gauges, Aneroid Barometers
Aviation Altimeters, Barographs, etc., etc.

Taylor Instrument Companies

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There's a Tycos and Taylor Thermometer for every purpose



CONSISTENCY

The government requests that everyone practice Thrift and Economy.

The government requests that retail selling be placed on a cash basis.

It is the patriotic duty of everyone to comply with these requests.

Thrift is the natural sequence of cash trading.

Paying cash benefits the individual and the community in which one lives.

Since 1896, *U. S.* Green Stamps, given as a discount for cash, have induced millions to trade in this profitable, beneficial, business-like way.

Today, these stamps are a symbol of Thrift in millions of homes in thousands of cities and towns throughout the United States.

In encouraging this method of trading, *U. S.* Green Stamps place within easy reach of everyone a most practical means for complying with the government's requests.

Thrift and *U. S.* Green Stamps are synonymous.

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to the various District Boards throughout the United States. A decision must be made in the case of each registrant and it is a matter entirely within the province of the District Board having jurisdiction of his registration card to determine his status. These Boards are made up of men of proven character, worth and intelligence in the various jurisdictions and to them has wisely been left the determination of these questions.

The Selective Service Law is being administered by over forty-five hundred Local Boards that have jurisdiction of all questions other than industrial questions, and by one

hundred and fifty odd District Boards that have jurisdiction in respect of determining whether individuals are entitled to deferred classification because of being engaged in some industry, occupation or employment, including agriculture, necessary for one of the purposes specified in the law.

The efficiency with which these men are administering the law is one of the outstanding illustrations of the power of a democracy to govern itself. There is no doubt they are performing a great service for their country and there is no doubt they are very creditably performing that service.

Food Production Is In Abundance, While High Prices Continue the Theme of Discussion

(Concluded from page 19)

and amount of production in many lines are being radically cut down that more material may be available for Government needs. The division of industries into non-essential and essential, with varying degrees of what is essential, still further complicates the ability of getting supplies.

High prices of commodities still continue to be the central theme of complaint and discussion. They cause the demand for higher wages to meet the increased cost of living, and the consequent added cost of production adds again to a still higher cost of living, and another demand for higher wages. There are no natural laws, such as those of supply and demand which can be regulated by human interference without involving consequent and unescapable trouble and complication. This is true even in emergencies such as the present, where such human regulation has proven itself absolutely necessary to restrain human greed.

The regulations have worked well on the whole despite their natural tendency to check production. It is obvious, however, that this regulation will steadily increase in scope and influence. So one of the many economic problems we shall face after the war is the extent to which regulation may wisely supplement the natural laws of supply and demand. As always in such periods of stress there are numerous remedies and specifics to cure the situation of its troubles, such for instance, as high prices. Forgetful meanwhile of our experience of the utter futility of such cures in the past and how the situation usually takes care of itself in a perfectly natural way. One of these suggested remedies is stabilizing the purchasing power of the dollar.

An Antiquated Theory

IT is difficult to understand how any one can take this proposition seriously since its entire argument rests upon the antiquated economic theory that present high prices are caused by the increasing volume of money in circulation rather than the natural law of supply and demand. Any one who cares to investigate the subject for himself will soon discover the elemental truth that high prices are caused by demand and that the increased cost of commodities inevitably calls for a larger volume of currency to transact needed business, so that the greater amount of currency is a matter of effect and not of cause. Also, today, even in the midst of war's influences, prices of commodities, where not regulated by Governmental action, fluctuate solely according to the influence of the laws of supply and demand, and without the slightest regard to the amount of money in circulation.

Zinc is less than half of the highest price it reached since 1914, because the supply now overtops demand.

Platinum has gone out of sight for exactly opposite reasons.

Corn has fluctuated for twelve months or more from natural causes, while the market prices of vegetables decline and rise as the supply is abundant or scanty.

When the present abnormal demand falls off, prices will decline, and the amount of money in circulation will have about as much to do with the case as have the flowers that bloom in the spring.

Facing An Unknown Future

OUR daily victories on the western front are spreading the belief that victory with peace is now only a question of not so long time. So among the many there is a growing thought as to what awaits the business world when that great readjustment arrives. Also, there is equally an increasing realization as to the very serious economic problems which will come with the cessation of fighting. Only those who live in a fool's paradise can fail to see that our present methods must then be made over, and that we shall need our utmost thought to meet a situation where the whole business world will be shot through with caution and apprehension as they confront an unknown and insoluble future. Few great upheavals, such as the present, ever follow the lines so freely prophesied about them. So it may be that we shall have a longer and more trying journey in the desert of uncertainty and perplexity than we now deem probable. There are not a few, however, who have a vision that beyond the desert lies a Land of Promise, of a far-flung, worldwide commerce, of an influence and power hitherto foreign to our experience, of more genuine democracy in economic life than has ever before been our portion, and the endless spread of that idealism which even now is Americanizing the world.

Our Gold Was Armed to the Teeth

GOLD to the extent of two billion dollars is now in the hands of our twelve federal reserve banks. That is a respectable piece of mobilizing and enables the reserve banks not only to have 35% in gold against the deposits they hold, but also 63% in gold against the federal reserve notes that are in circulation.

Fiscal preparedness for war or any other eventuality was one of our accomplishments; for, however backward we may have been in making ready in other directions, we were fairly timely with our federal reserve system.

How the Dictograph is Helping the Nation's Business to Win the War



The Dictograph System of Interior Telephones

By Eliminating Wasted Effort and Time
By Automatically Distributing Detail
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By Compelling Individual and Collective "Team Work"

**NOT ONLY CONSERVES MAN POWER, BUT GREATLY INCREASES ITS EFFICIENCY,
THEREBY EFFECTING MAXIMUM PRODUCTION AT MINIMUM COST.**

IN Army and Navy Buildings, in munition plants and Ordnance factories, in the hundreds of offices, mills and shops where "Speed" spells Victory, the Dictograph System of Interior Telephones is increasing efficiency and speeding up production under heavy pressure.

The Dictograph enables the General Manager or other Executive, without leaving his desk, and by merely pressing a key, to control and direct into the proper channels the vital, concentrated, individual and collective energy and efficiency of the entire organization.

The Dictograph System is in daily successful use by more than 20,000 foremost American Executives.

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Pennsylvania Lines New York Central Lines Am. Brake Shoe & Foundry Co. Upson Nut Co. Columbia Steel & Shafting Co. International Paper Co. Virginia Shipbuilding Co. Baltimore Dry Docks & Shipbuilding Co. Standard Steel Car Co.

To every Executive interested in more efficiently conducting the Nation's Business we want to send, with our compliments, an
"ESSAY ON EXECUTIVE EFFICIENCY"

And we would also be pleased to submit, without obligation, definite data on the cost of such a Dictograph System as you may need in your organization.

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Proposed Legislation Affecting Business

(Continued from page 45)

Government control is urged in Germany partly because the government will be expected to find raw materials and partly because new conditions have arisen. In the textile industries, for example, Germany will apparently be able to get no Egyptian cotton or Australian wool, both of which will be controlled for several years after the war by the British Government. At the same time, German mills face a change in international industrial conditions, since while Germany has waged war the spindles and looms in other countries have materially increased.

As a means of governmental control, economic boards are suggested by the German reconstruction agency. Each would have in its membership representatives of the industries affected. The boards would have official standing. Their duties would be to attend to allocation of supplies, to make the transactions of their industry support the country's great needs in foreign exchange, and to distribute the use of such ocean tonnage as Germany has fairly among the members of the industry.

These economic boards would get their assignments of ocean tonnage from the Tonnage Distribution Office. This office is designed to lay down the preferences that different articles are to have, especially among imports, for which Germany's need will be exceedingly urgent.

New Zealand's Nest Egg

PERHAPS New Zealand has been unique in preparing for reconstruction. It has not failed to make ready for its returning soldiers, but at the same time it has exerted itself with taxation until it has a surplus of revenue over expenditures. This surplus it has laid away in British war bonds as a "nest egg" against the contingency of hard times for governments and individuals in the transition period.

By a lucky strike, upon almost the day when bills were introduced in Congress, the Bureau of Foreign and Domestic Commerce came out with a monograph describing the progress made abroad in planning for the reconstruction period. It deals with government participation in trade and industry which is apparently to occur in Europe, describes movements for economic alliances, and goes into some detail about preparation for the after-war period. It adds some very timely statistics about raw materials and foodstuffs—their production, distribution and consumption.

As for ourselves, we are not wholly in the position of having made no progress in reconstruction studies. The Tariff Commission, for instance, has been getting together data of a very specific sort. Examples are a study of the glass industry as affected by the war and an analysis of the dyestuff situation in the textile industries. With these studies the commission need not stop; for the law creating it permits it to inquire into economic alliances, commercial treaties, the effect of export bounties, and the results of preferential transportation rates.

Power

WHETHER or not legislation regarding water powers on navigable streams and on the public lands of the West will pass in this Congress, after ten years of discussion, is difficult to predict. The likelihood of considerable contest over such legislation in its final stage makes it doubtful if a law can be enacted before March 4, when this Congress ends *sine die*.

The present situation is a little novel. The Senate last year passed a bill dealing with

water powers on navigable streams. To consider this measure the House created a special water-power committee. This committee eventually reported a new bill, relating to all water powers over which the federal government has any control, except such as the falls at Niagara, and setting up a water-power commission to exercise administrative duties. This bill passed the House on September 3. By some Senators it was considered such an entirely new bill that it should go to the regular Senate committee, and receive full consideration by the Senate, before it went to conference. Eventually, September 27, the bill was placed in the hands of conferees. It now remains to be seen whether or not the conferees of the House and Senate can reach an agreement upon numerous and difficult points, and whether or not any agreement they achieve will be acceptable to both House and Senate.

That power plays a great part in modern war is emphasized by the emergency legislation which has been drafted to enable the government to use \$175,000,000 in creating immediately new power facilities. Power is needed even to produce coal. According to statements made by the Fuel Administration, there has been loss of production in important fields because the extension of existing power plants cannot now be financed. Plants furnishing power for war industries, which constantly call for more current, are in like case. Such situations would be met under the new bill, which has yet to pass the Senate, by government intervention.

New Appropriations

ABOUT the middle of October, the House Committee on Appropriations will bring forward a new bill adding \$8,000,000,000 to the appropriations that are available for this year.

In July the appropriations for the current year were placed at approximately \$24,000,000,000. If that figure is correct, the new bill will increase the total to \$30,000,000,000 and more.

The important items of the new bill will be for the Army, the Navy and nearly \$500,000,000 for the Shipping Board.

Mineral Control Bill

ON October 5 the President approved the bill which is intended to promote production of mined metals in the United States that our dependence upon external sources of supply may be decreased and ocean tonnage proportionately freed from carriage of minerals to the United States. Under the law, the President may proceed, probably through a government corporation financed from the appropriation of \$50,000,000 carried in the law, to make contracts with domestic producers and to take their output at prices set in the contract at figures which will be reasonably remunerative. Not only one central corporation but local corporations may be formed for this purpose.

Daylight Saving

UNDER existing law, daylight saving will cease on Sunday morning, October 27, when clocks will be turned back one hour to remain until March 30, 1919, at which time they will again be advanced for daylight saving next year. On October 10, however, the Senate passed a bill which would keep the clocks of the country as they are now throughout the whole year. Whether or not the House will have opportunity to deal with this bill before October 27 is still uncertain.



A thousand messages to Garcia

HE "took the letter," says the book; "sealed it up in an oilskin pouch, strapped it over his heart, in four days landed by night off the coast of Cuba from an open boat, disappeared into the jungle, and in three weeks came out on the other side of the island, having traversed a hostile country on foot, and delivered his letter to Garcia."

The man who delivered the message to Garcia was simply told to get that letter through. There were no details about how he was to do it, where to go, what road to take; nor did he stop to ask. He took the letter, and he delivered it to Garcia.

This is the day of the man, and of the industry, that can do—just that.

To one it falls to build airplanes, so many by such a day; to another to make cartridge clips; to another to deliver a binder in time for harvest on the plains of Kansas; and to another to get that binder there on time. To each his message—to each unqualified responsibility for the delivery of his message.

THE FREIGHT FORWARDER, for example—his job is to get that binder there on time, to get machinery, automobiles, household goods, shipments of every kind there on time, with a minimum of transfer, handling, delay, damage, and expense. He specializes on getting freight through. His job is to tackle obstacles and overcome them. Daily he delivers to Garcia not one message but thousands.

From freight-clogged terminal to freight-clogged terminal, by heaped-up trucks roaring over cobble stones, in and out of sidings, by cars rescued from the scrap-heap or rushed new from the shops, hauled by old spavined locomotives with the heaves or by black monsters capable of topping the divide without a grunt—always the freight moves forward.

And always in the thick of that tangle of track and jam of trucks, cars, and engines, moves the freight forwarder, guarding, watching, and hurrying on its ways the goods committed to his hands.

He stays with it from the moment the shipment is delivered at the shipper's warehouse till he lands it right side up with care at the terminal of the consignee for delivery.

He saves freight charges by consolidating many shipments and sending them together at carload rates; he bills the car through; arranges for its straight, quick passage with no delay or handling en route; traces it through every stage of its journey; gets it started again if there be delay; and finally snatches it from the car and whisks it out of the terminal straight to its destination; in short, ploughs right through—delivers to Garcia.

All this he does. And it is an absolutely necessary service—a service that can be rendered only by a man who deals in quantity transportation. No shipper can afford to overlook it.



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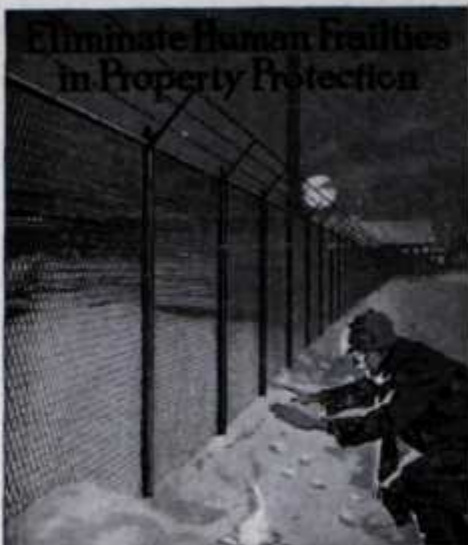
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Horn-Swoggling the Business Man

(Continued from page 17)



Anchor Post Fences

These are the nights when watchmen are tempted to think more of their personal comfort than of your plant's well being. The thief, the pillager and the firebug know the frailties of watchmen on such nights and time their acts accordingly. Foil their plans with an

Anchor Post Fence of Chain Link Woven Steel

An Anchor Post Fence is on the defensive at all times and in all weather. It presents to the unwelcome trespasser a steel barrier so formidable that it discourages even the thought of penetrating, climbing or scaling it. The outside of the fence presents a smooth, unbroken surface of Chain Link Fabric that not even a cat could climb. And it is topped with a barbed wire entanglement that is extremely business-like.

There is no better or more lasting fence for the purpose than an Anchor Post Fence. Proof of it is in the class and number of Anchor Post protected government and private properties. Catalog 52.

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that it had not had time to take more than the preliminary steps in studying the bituminous industry and that "the fundamental problem has never been touched yet." Moreover, the Commission's report of June 20, 1917, entitled "Anthracite and Bituminous Coal," and consequently suggesting that it contained a comprehensive statement of the Commission's information about bituminous coal, devoted its three hundred and twenty-five pages to anthracite, merely incorporating some hasty generalizations regarding bituminous. As for the committee's statement that 40,000,000 tons in the annual production of bituminous coal could not be produced at the prices placed by the Commission before the President, it is an exact reproduction of testimony given on January 23 by the member of the Commission's own staff who had charge of its activities respecting bituminous coal.

The Big Question for the Plain Citizen

THESE things are worth noticing now only in the interest of historical accuracy, for the Commission no longer has any very im-

portant duties regarding bituminous coal; in July of this year it lost most of its functions in relation to coal to the Fuel Administration. Inconsistencies are apparently of as little concern to the Commission as irrelevancies. In this instance both these forms of indiscretion in fact served the same purpose: they were made ready and were seized upon by certain newspaper interests with which the chairman of the Commission has had direct connection, made into sensational and false dispatches, and given wide circulation. These dispatches appeared with such headlines as "Attack Dictated by Packers" contained such wilful falsehoods as that the president of the Chamber had in effect withdrawn the statements in the committee's report.

Thus, the roorback was set going. The important question now for the Commission is how much of a boomerang it will turn out to be. There is a bigger question for plain citizens. No amount of dust can hide it. This question is whether the Commission is to be a constructive or a destructive force in the land.

Headlines from London

These items of Anglo-American business news are supplied by the Trade Information Committee of the American Chamber of Commerce in London, 8 Waterloo Place, Pall Mall, London, S. W. 1. The American Chamber of Commerce, founded last year, has as members three hundred leading American firms and individuals doing business in Great Britain, and three hundred leading British firms doing business in America. This London Trade Information Committee undertakes to answer any questions connected with Anglo-American Trade. The items below have been sent as part of a news service which the London Chamber has established.

British and American Conferences

IT has been proved again and again that foreign government restrictions severely affecting American business are often the result of misunderstandings. Because of this, the American Chamber of Commerce in London does regular work in keeping British Government officials informed as to American business opinions and conditions. Among other examples of the Chamber's work in this direction is the way in which important officials dealing with business, such as Sir Albert Stanley, President of the Board of Trade, and Sir Arthur Steel-Maitland, head of the Department of Overseas Trade, have been brought into close acquaintance with the Chamber by means of special conferences.

A Commercial Rapprochement

THE right kind of preparation for after-the-war-business should be made now, according to Philip B. Kennedy, American Commercial Attache in London, in a recent address. The actual control of materials and operation of industry and trade must be kept in the hands of the Government during the war, but Mr. Kennedy praised the work being done by the American Chamber of Commerce in London, to whom the address was made, in securing information as to after-war needs and in bringing about closer relations between British and American business men.

Noted English Banker Speaks

THE arguments by which Sir Edward Holden, Chairman of the London City and Midland Bank, Ltd., recently convinced the Associated Chambers of Commerce of Great Britain that the new huge bank amalgamations were in the very best interests of British foreign trade, apply equally to American banking conditions. Foreign trade, of no matter

what country, that is not intelligently and willingly financed can never succeed after the war.

International Trade Acceptances

THE trade acceptances which are doing so much in America today to remove the old "lack of capital" difficulty were based to a great extent on the older international acceptances. But the way in which they have served American business at home suggests that great improvement can be made in American sales terms abroad, by similar means. So long as American manufacturers feel they must demand cash against goods in New York there will be serious weakness in our foreign business. The American Chamber of Commerce in London is making a detailed study for the terms at present demanded by American firms doing business with England and it intends to propose a plan for extending the advantages of American international trade acceptances to all American firms willing to export.

A Bank Abroad's the Thing!

BANKING amalgamations are epidemic abroad. Italy is the latest country to experience the movement. Four leading Italian banks have combined for stated purposes, including opening of branches abroad and support of Italian firms which undertake to exploit foreign markets.

European amalgamations have a very direct relation to preparation for foreign trade. That is a direction in which we have been making a little progress. Since 1913, when our national banks were first permitted to engage singly or in co-operation among themselves in opening foreign offices, they have inaugurated twenty-seven branches in foreign countries and in addition these branches have something like fifty sub-branches.

War Conferences of Industry

MEMBERS of the more than 300 industrial War Service Committees formed under direction of the Chamber of Commerce of the United States will be called together for a war conference at Atlantic City on December 4, 5 and 6. At this meeting there will be discussed problems that today confront every business man in the United States. Officers of the Government, who daily are in conference with one or more of the committees will be present.

The Chamber's national councillors will be called together at the same time and joint and separate sessions will be held.

The growing demands the war has made on the country's industrial resources have made it increasingly harder for the non-war industries to maintain their footing. One of the most important subjects that will be taken up is the imperative necessity for making provision to maintain at least a skeleton of the non-war industries that business will have something on which to build when America emerges victorious from the war.

Leaders see that problems that have arisen with the war will be overshadowed in many instances by problems that will come with reconstruction and readjustment. These questions will have a prominent place on the Atlantic City program.

Again We Give

ONE of the largest and most important charity campaigns ever undertaken will occupy the attention of this country during the week beginning November 11. The United War Work Campaign will ask the American people at this time for \$170,500,000, this money to go to the following organizations: The Y. M. C. A., the Y. W. C. A., the National Catholic War Council (including the Knights of Columbus), the Jewish Welfare Board, the American Library Association, the War Camp Community Service and the Salvation Army. At the suggestion of President Wilson these organizations are working together as a unit with full co-operation.

Bishop Gailor Named

BISHOP THOMAS F. GAILOR, of Memphis, Tennessee, has been named a vice-president of the Chamber of Commerce of the United States. He is eminent not only as a churchman but as a man of letters and a publicist. Bishop Gailor has taken the keenest interest in public questions and has been a member of the Chamber's Committee on Railroads. As a vice-president of the Chamber he will sit as an ex-officio member of its board of directors.

Food Administration Shifting

THE Food Administration is pursuing a steady policy of decentralizing its administrative activities so far as possible into States, and this policy results in a considerable reduction of the personnel of the Washington force. For instance, the force in Washington last July numbered 1832 persons while on September 30 it was 1653. The average rate of reduction per week at the present time is twenty.

The National Association of Commercial Organization Secretaries will hold its fourth annual meeting in Rochester, N. Y., on November 11, 12 and 13.



War Service and System Service

SO many of our employees have left for the War, and so much of our factory space is devoted to government work that it is difficult to keep the Production of filing devices and supplies up with the increasing pace set by Demand.

We are, however, keeping intact our highly specialized sales representation, and diverting the full power of its energy and ability from sales-work into **SYSTEM PLANNING SERVICE**, for the Government and for Industry.

Without proper methods and equipment for keeping its records, Industry would be crippled within a period of weeks; the Government would meet untold difficulties in the conduct of the war.

Record Filing equipment and supplies are the foundation of business that is built to endure, and System Service is the architect. Y and E Equipment, Supplies and System Service are even greater necessities today than ever before.

For these reasons we are doing the utmost to overcome Production difficulties, and will also maintain our System-Planning Service—at our own expense, as always—for the periods of the War and the Reconstruction.

We welcome inquiries about methods thought best for handling any system of record-keeping. Write us (fully), or inquire of our local representatives. Address on request.

Vertical Filing Systems
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1st. The bristles and hair are highest grade, prepared for use by the WHITING-ADAMS method, which retains toughness, elasticity and a velvet softness of ends. This makes the part of a brush that is used, perfect in quality and long wearing.

2nd. Every bristle and hair is held by pure, best quality RUBBER: no tacks, coal tar, chemical imitation of rubber is used in our factory. "Rubber" means PURE RUBBER in all WHITING-ADAMS VULCAN RUBBER CEMENTED BRUSHES. The tufts of bristles or hair are completely saturated and surrounded with STRICTLY PURE RUBBER in semi-liquid state, and then vulcanized hard as granite.

3rd. WHITING-ADAMS Brushes cost little and wear long. Our large volume of business reduces cost of manufacture to lowest point, and selling prices are made none too low.

4th. Manufacturing brushes as we have for over 100 years means that we know brushes, and know of our brushes because the full benefit of our brush knowledge.

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OIL

The Government pipe wrench is being applied to our oil leaks to stem increasing consumption faced with diminishing supply

By W. CHAMP ROBINSON

Chief, Bureau of Oil Conservation

WE have become the foremost oil producing country of the world. Before the war, we furnished over 65 per cent of the world's output of petroleum products, and used a goodly percentage of that output ourselves, at home.

This produce is vital to the one object to which all the industry of the country is turned, namely, the winning of the war. Therefore it came under the jurisdiction of the Fuel Administration. So important in the eyes of that board was it, that a separate Bureau, known as the Bureau of Oil Conservation, was formed with W. Champ Robinson as its Director, to work it out. The problem was to keep, as far as possible, from drawing on the small reserve on hand and, if possible, to build a large one for the future so that we would be safe in case of unforeseen emergencies.

Comparison Between Oil and Coal

IN order to get a definite idea of the importance of the oil industry in these war times, a comparison between oil and coal may be made, which will show perhaps better than in any other way the values of the two as fuel, and the great part oil is playing in the war. Coal, as a fuel, is more widely known to the people of the nation, because it enters into our national life more intimately. Take shipping. A cargo carrier of 5,000 deadweight tons, which is the average size of ship used for this purpose, will be taken as an example.

The distance from New York to France and return is in round numbers 6,200 miles. It has been found that a ship burning coal will make an average speed of 12 knots per hour, as against 13.2 knots when burning oil as fuel. Therefore, by burning oil as fuel, two full days may be cut from the actual running time of a vessel in making this trip, the difference in running time being 21 days for coal and 20 days for oil. There is no need of telling what the saving of two days in the running time of a vessel means, when every effort is being made to hasten shipments on our overburdened shipping facilities. But that is not all, for there is also a great saving in the amount of fuel consumed. On this trip a coal ship would consume 1,060 tons of fuel, 748 tons in the actual 22 days to make the trip, 170 tons additional for five days they would use in staying with the convoy, 50 tons in five days' stay in port, loading and unloading, and 92 tons of coal for reserve consumption in case of necessity. The oil-burning boat, faster by 1.2 knots, would only consume 420 tons of fuel in 20 steaming days, 104 tons in convoy, 30 tons in port and a reserve of 50 tons, making a total of 584 tons of oil consumed in a round trip, a differential in favor of the oil burner of 476 tons, or not quite half as much as fuel. Then, too, the cost of the oil shows a further increased differential in its favor.

But consumption is not the only element which is in favor of oil as fuel. There are three other elements which are just as important to war-time shipping, and those three elements are time, space, and man-power. It takes two days to bunker a coal-burning vessel of the same size as one burning oil, which can be sup-

plied in six hours. In apparent deadweight carrying capacity, because the oil is less bulky and easier to store, and lighter, it will permit 76 more tons of freight to be carried, and there is a quarter more space for use. In manpower it takes twelve men to stoke and trim coal on a coal-burner, as against four men on the oil-burner.

From this comparison it can readily be seen that there would be a vast increase in the consumption of fuel oil, for use in the navies, in shipping and in our industries. It is a saving of time, money and space. Realizing this, the consumption has more than doubled in fuel oil, which, coupled with the enormous consumption of gasoline for trucks, for both war purposes on the front and transportation in this country, its use for airplane abroad and pleasure automobiles in this country, with its attendant volume of lubricating oils, produced this serious situation, in regard to a shortage.

Waste Is Appalling

THEREFORE, in studying the situation for a solution of the problem, the facts and figures of oil production, manufacture and consumption, as compiled by the Bureau of Mines of the Department of the Interior, the only available figures at the time, were used. Those figures immediately showed that the waste in petroleum products was most appalling. It has been said that waste is an American habit. It has been claimed that some nations could grow rich on what the Americans waste annually. It is certainly so in the case of oil.

That total amount may never be known, but from what is known, it is large enough, and the Bureau of Oil Conservation was given the chance to hang its hat of conservation on the hook of wastage. The mere elimination of it, to a great degree, will solve the problem. Therefore, government supervision must not only plug the bung-hole in the dripping waste barrel, but it must apply the stilson wrench to the pipe joints in the refineries, must place the steel hoop around the barrel tighter in the cooperation of plants, must solder the leaky oil can in the hand of each individual and must be the traffic "cop" who stops the joy rider at the Sunday crossroads.

Oil Industry Is Helping

THIS control will touch every phase of our national life, its industry, its fireside, its pleasure. The elimination of the waste must be at the source, the oil well; at the refinery, among manufacturers in industry, among workmen, and even at times in unnecessary pleasures as in the use of automobiles.

The Bureau of Oil Conservation has the co-operation of the oil industry and most of the consuming industries of oil products; there remains only the co-operation of the individual and it would seem from reports that the individual is equally as anxious to co-operate as the others—all to the end that, not only a national, but an international calamity may be averted.

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